

# Chemoreception Abstracts

Chemical senses & applied techniques

Annual Indexes to Volume 8 1980

QP

455

C48

1981

INDEX

V. 8

54'

UIC  
NOV 2 1981  
LIBRARY



Published in association with the  
International Association of Chemoreception Research  
Organization

0300-1261

An Information Retrieval publication



Digitized by the Internet Archive  
in 2024

# Chemoreception Abstracts

Chemical senses &  
applied techniques

Annual Indexes to Volume 8 1980

**Editor** Sonia Rollo, IRL, London

**Editorial advisers**

P. Mac Leod, Ecole Pratique des Hautes Etudes, Fontenay aux Roses, France

R. Harper, Department of Food Science, University of Reading, England

E. P. Köster, State University of Utrecht, The Netherlands

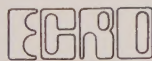
G. M. Shepherd, Department of Physiology, Yale University Medical School, New Haven, USA

R. C. Gesteland, Department of Biological Sciences, Northwestern University, Evanston, USA

**Author Index** pages 1-10

**Subject Index** pages 11-64

**ISSN 0300-1261**



Compiled quarterly by Information Retrieval Limited  
in association with the European Chemoreception Research Organization,  
Collège de France, Paris



# Subscriptions

An annual subscription to Chemoreception Abstracts includes four quarterly issues, each containing an Author and Subject Index, and a separate Annual Author and Subject Index sent without further charge to subscribers after completion of the volume. Subscriptions are entered on a calendar year basis only.

## Annual subscription rates 1981

North, Central and South America (including air delivery)	US\$175.00
UK & overseas (surface)	£ 65.00
Overseas (air)	£ 68.00

## Two-year subscription rates

Save 5% on a two-year subscription to the 1981 and 1982 volumes. To calculate the two-year rate, simply double the 1981 price above and deduct 5%.

## Personal rate subscriptions

Half-price subscriptions are available to research scientists whose institutions already subscribe at full rate. Details on application from the publisher.

Members of ECRO are entitled to special reduced rates — details on application from the publisher.

## Orders

Orders from or on behalf of subscribers in the various geographical areas shown below should be routed to the appropriate IRL office or sole agent with payments made in the currencies marked:

### Western hemisphere

(North, Central and South America — payment in US dollars)  
Information Retrieval Inc.,  
1911 Jefferson Davis Highway,  
Arlington, VA 22202,  
USA.

### Japan

(payment in yen)  
US Asiatic Company Limited,  
Tsutsumi Building,  
13-12 Shimbashi 1-chome,  
Minato-ku, Tokyo 105, Japan.

日本における予約購読価格はIRLカタログの  
ポンド表示とは関係なく、円建となっており、  
航空貨物便 (air cargo) 料金を含んでおります  
のでご了承下さい。  
尚、ご注文は、最寄りの洋書取扱店にお申し込  
み下さい。

**India, Sri Lanka, Bangladesh, Nepal, Burma,  
Malaysia, Singapore, Indonesia and Thailand**  
Universal Subscription Agency Pvt. Ltd.,  
117/H-1/294-B Model Town,  
Pandu Nagar, Kanpur 208005,  
India.

## Rest of the world

(payment in sterling)  
Information Retrieval Limited,  
PO Box 1,  
Eynsham, Oxford OX8 1JJ,  
England.

© 1981 Information Retrieval Limited  
All rights reserved by the publisher. No part of  
this publication may be reproduced or  
transmitted in any form by any means,  
electronic or mechanical, including  
photocopying, recording or any information  
storage and retrieval system, without  
permission in writing from the publisher.

Chemoreception Abstracts (ISSN 0300-1261) is  
published quarterly with an annual index for  
US\$175.00 per year by Information Retrieval  
Limited, London, England.  
Second class postage paid at Jamaica, NY  
11431.

Send US address changes to  
Information Retrieval Inc.,  
1911 Jefferson Davis Highway, Arlington,  
VA 22202.

Printed by  
Information Printing Ltd, Oxford, England

Published by  
Information Retrieval Ltd.,  
1, Falconberg Court, London W1, England.

# Preface

---

These indexes are cumulations of the monthly indexes from the 1980 volume of Chemoreception Abstracts.

The **Subject Index** is compiled in the following way. For each document the indexer selects indexing terms from fixed lists of keywords which are continually updated. From these selected terms word chains are constructed, the word order being determined by the indexer. It is these word chains which make up the **Subject Index** entries.

The index terms used to create the **Subject Indexes** plus additional terms selected by the indexer to further describe and define the document are also present as a search tool in the IRL database.

The following conventions apply to all terms used in the **Subject Index**:

- (1) Latin binomials are used for all taxonomic terms except domestic animals, livestock and pets.
- (2) Enzyme names follow the 1978 recommendations of the IUPAC and IUB.



# IRL publications

---

## **Abstracts journals**

Animal Behaviour Abstracts

Aquatic Sciences & Fisheries Abstracts:

Part 1 - Biological sciences & living resources

Part 2 - Ocean technology, policy & non-living resources

Biochemistry Abstracts:

Part 1 - Biological Membranes

Part 2 - Nucleic Acids

Part 3 - Amino-acids, Peptides & Proteins

Calcified Tissue Abstracts

Chemoreception Abstracts

Ecology Abstracts

Entomology Abstracts

Genetics Abstracts

Immunology Abstracts

Microbiology Abstracts:

Industrial & Applied Microbiology

Bacteriology

Algology, Mycology & Protozoology

Toxicology Abstracts

Virology Abstracts

A list of source periodicals used in the preparation of these abstracting services is available.

## **Back volumes/microfilm editions**

Back volumes are available for all IRL journals more than one year old. It is the policy of IRL however to allow to go out of print (OP) volumes more than five years old. While stocks remain prices for printed back volumes are quoted by the Publisher. All volumes declared OP are maintained on microfilm masters from which duplicates are available.

## **IRL database products**

The above abstracts journals contain over 130,000 abstracts per annum. Computerisation of the abstracting process in 1978 has created a database suitable for on-line searching. The database containing all the above abstracts journals except Aquatic Sciences and Fisheries Abstracts is available on Lockheed DIALOG as file 76, the IRL Life Sciences Collection. Aquatic Sciences and Fisheries Abstracts is available separately as File 44. Other IRL database products include: searchable tapes of the entire database or of subsets consisting of the medical group of IRL abstracting services or of individual journals; weekly Current Alert profiles on selected topics; personal SDI or retrospective searches; bibliographies.

## **Other publications**

IRL Press Ltd publishes several learned journals, conference proceedings and practical handbooks in the biological and medical sciences. A full list of titles is available on request from your nearest Information Retrieval office.

# Author Index

- Abdel-Kader, M.M. 767.  
 Aberie, E.D. 280.  
 Abidoie, D.F.O. 1592.  
 Abou-El-Fadl, I.A. 1518.  
 Abraham, W.C. 1116.  
 Acciardi, J. 220.  
 Aceves-Pina, E.O. 847.  
 Ache, B.W. 27.  
 Ackerman, S.K. 723.  
 Adamenko, E.A. 784.  
 Adda, J. 949, 951.  
 Adham, F.K. 759.  
 Adler, J. 744, 1206.  
 Adler, N.T. 870.  
 Adlung, K.G. 823.  
 Afzal, M. 1255, 1318.  
 Agosta, W.C. 867.  
 Agren, L. 74, 666.  
 Aguayo, M. 1577.  
 Aguilera, J.M. 1550.  
 Ahlgren, G. 140.  
 Ahmad, A.K.S. 251.  
 Ahmad, I. 1255, 1318.  
 Ahmad, R. 216.  
 Ahmad, Z. 1290.  
 Ahmed, M.S. 1509.  
 Ahvenainen, J. 964.  
 Aishima, T. 957, 958, 959.  
 Aiuchi, T. 1222.  
 Akoef, G.N. 1055.  
 Al-Abta, S. 1455.  
 Alam, S.K. 117.  
 Alba, M. del C.M. 1078.  
 Alberola, J. 954.  
 Alberts, J.R. 149.  
 Aldrich, J.R. 83.  
 Alford, D.V. 109.  
 All, J.N. 139.  
 Allen, N. 84.  
 Aller, T. 1314.  
 Althaus, D. 1085.  
 Amer, M.M. 251.  
 Ames, P. 1212.  
 Amore, J.E. 1090.  
 Anadu, P.A. 1397.  
 Anand, A. 1145.  
 Anderson, A. 691.  
 Anderson, R. 725.  
 Anderson, R.E. 1465.  
 Anderson, R.J. 942, 1446.  
 Andersson, G. 177, 894, 1434.  
 Andersson, K. 177.  
 Andre, J.C. 1502.  
 Andrew, R.H. 1019.  
 Andron, R.I. 1088.  
 Angjoy, A.M. 701.  
 Angst, M.E. 5, 6.  
 Anikso, J.J. 870.  
 Antonio, A.Q. 1247.  
 Antony, P.D. 1009.  
 Antunes, P.L. 1017.  
 Aoyagi, Y. 1581.  
 Arackal, T. 261.  
 Archer, T. 155, 160, 1375.  
 Ardeshir, A.G. 962.  
 Arenas, E.C. 1293.  
 Armitage, J.P. 54, 1214.  
 Arn, H. 1249, 1253.  
 Aron, C. 67, 1336.  
 Aronson, R. 881.  
 Arshad, F.B. 1568.  
 Arvidson, K. 1096.  
 Asano, S. 1438.  
 Asanuma, N. 1065.  
 Ashbaugh, N. 1080.  
 Ashley, T.R. 1257.  
 Ashraf, M. 216, 219, 222, 223, 224, 225.  
 Astic, L. 1125.  
 Aswanikumar, S. 1194.  
 Atema, J. 806, 1047, 1064, 1256, 1272, 1347.  
 Atkinson, J.P. 1190.  
 Aubert, O. 1484.  
 Aulenbach, B.B. 1018, 1465.  
 Ave, D. 13.  
 Avrith, D.B. 1403.  
 Ayres, J.L.L. 1544.  
 Aziz, J. 223, 224.  
 Baehner, R.L. 729.  
 Bagdassarov, E.B. 1053.  
 Bahri, D. 200.  
 Baile, C.A. 1422.  
 Bailey, B.K. 824.  
 Bailey, J.S. 258.  
 Bainbridge, C.W. 1149.  
 Baker, R. 146, 1263.  
 Baker, R.C. 260.  
 Baker, T.C. 772, 1284.  
 Balaban, P.M. 805.  
 Balan, J. 757.  
 Balanova, J. 757.  
 Balasubramanian, M. 1290.  
 Balcke, C. 948.  
 Baldwin, B.A. 1337.  
 Baldwin, R.E. 284, 1026.  
 Balla, J. 1225.  
 Ballester, D. 1577.  
 Baltensweiler, W. 837, 838.  
 Baltes, W. 181, 182, 192.  
 Balthazart, J. 150.  
 Banks, E.M. 1328.  
 Banks, W.A. 1319.  
 Bar-Eli, M. 692.  
 Barak, A.V. 767.  
 Baranoski, L. 1331.  
 Barber, R. 746.  
 Barbosa, S. 1290.  
 Bard, J. 1331.  
 Barfield, R.J. 869.  
 Barger, J.H. 144.  
 Barker, L.M. 161.  
 Barofsky, I. 908.  
 Barone, F.C. 923.  
 Barr, G.A. 1129.  
 Barr, I.M. 1158.  
 Barral, J. 1290.  
 Barrell, G.K. 709.  
 Barrer, P.M. 1238.  
 Bartoshuk, L.M. 685, 694.  
 Basker, D. 1585.  
 Bass, D.A. 1197.  
 Bassano, D.A. 1377.  
 Batra, S.W.T. 143, 857, 1301.  
 Batty, J. 1354.  
 Bau, H.M. 1547.  
 Baugh, L.C. 246.  
 Bauman, M.P. 723.  
 Baylin, F. 669.  
 Bazard, D. 1502.  
 Bazua, C.D. 274.  
 Bazzarini, R. 211.  
 Beard, L.J. 1187.  
 Beasley, S.H., Sr. 952.  
 Beauchamp, G.K. 888, 889, 1119.  
 Bebiolka, H. 1606.  
 Bechard, M.J. 968.  
 Becker, E.L. 1179, 1183, 1194.  
 Bedard, W.D. 974, 1281.  
 Beddows, C.G. 962.  
 Beebe, D.P. 1152.  
 Beets, M.G.J. 693.  
 Beevers, M. 836.  
 Beevor, P.S. 77, 90, 771.  
 Behrends, P. 1350.  
 Beiderbeck, R. 741.  
 Beilharz, R.G. 929.  
 Bekoff, M. 151.  
 Bel, W.J. 1507.  
 Bell, A.D. 952.  
 Bell, E.A. 1261.  
 Bell, W.J. 761.  
 Bellas, T.E. 766.  
 Bellingham, W.P. 1367, 1372.  
 Bello, A.A. 1113.  
 Bellon-Humbert, C. 26.  
 Belosevic, M. 1258.  
 Belousova, T.A. 10.  
 Belsham, J. 719, 1195.  
 Benedetti, W.L. 940.  
 Benkler, K.F. 1036.  
 Benvenuti, S. 1428.  
 Berg, H.W. 1572.  
 Bergman, K. 1212, 1602.  
 Bergstrom, G. 140, 840, 852, 1239, 1309.  
 Bernisford, C.W. 833.  
 Berk, G. 1408.  
 Berlinger, M.J. 1292.  
 Berman, E.J. 1393.  
 Berndt, K.P. 68.  
 Bernstein, J.J. 1137, 1138.  
 Berry, B.W. 997, 1593.  
 Bertrand, M. 1494, 1495.  
 Best, M.R. 899, 1374.  
 Bestmann, H.J. 1442, 1444.  
 Bethea, R.M. 983.  
 Beuchat, L.R. 295.  
 Beylina, S.I. 752.  
 Bhardwaj, D. 1389.  
 Bhatnagar, K.P. 1144.  
 Bhaty, A. 222.  
 Bhaty, M.K. 216, 217, 219, 221, 222, 223, 224, 225.  
 Bieger, D. 33.  
 Bierl-Leonhardt, B.A. 116, 1242, 1243, 1285.  
 Biermann, U. 191, 212.  
 Biever, K.D. 1286.  
 Biggar, W.D. 49.  
 Bigliardi, D. 211.  
 bin Daud, W.J. 962.  
 Birch, G.G. 683, 1061.  
 Bisgard, G.E. 41.  
 Black, A.J. 935, 936.  
 Blancaquert, J.-P. 1316.  
 Bland, R.G. 1262.  
 Blaney, W.M. 12.  
 Blauw, Y.H. 1022.  
 Blendl, H.M. 985.  
 Blindermann, J.M. 1117.  
 Blizard, R.A. 892.  
 Blum, M.S. 83.  
 Blythe, J.L. 1285.  
 Bobok, D. 757.  
 Boer, H. 1235.  
 Bogenschütz, H. 1253.  
 Boissin, J. 1363.  
 Bolt, M. 1345.  
 Bonassi, I.A. 1574.  
 Bonmati, R. 292.  
 Bonthib, S. 729.  
 Booth, D.A. 681.  
 Booth, W.D. 1337.  
 Boquet, P. 52.  
 Borden, J.H. 115, 128, 133, 945, 1288.  
 Borg-Karlson, A.-K. 849.  
 Born, W.S. 910.  
 Bott, E.W. 965.  
 Bouissou, M.-F. 1364.  
 Bourgoignie, R. 1316.  
 Bowen, W.D. 1359.  
 Boxer, L.A. 729.  
 Boyse, E.A. 1331.  
 Bozarth, M.A. 158.  
 Bracken, G.K. 827.  
 Bradley, M.M. 1610.  
 Bradley, R.M. 1068, 1136.  
 Bradshaw, D. 52, 727, 1193.  
 Brain, P.F. 1351.  
 Brander, C.F. 1479.  
 Brandon, R.A. 1396.  
 Branson, B.A. 1110.  
 Brash, A.R. 1188.  
 Braun, G. 1606.  
 Braun, J.J. 907.  
 Bray, F. 1540.  
 Bray, M.A. 1200.  
 Brayton, R.K. 1049.  
 Breed, M.D. 777.  
 Bremiller, R. 901.  
 Brennan, J. 237.  
 Briddell, D.W. 24.  
 Briggs, M.T. 1504.  
 Brim, C.A. 98.  
 Bristow, P.R. 1583.  
 Bristowe, W.S. 145.  
 Brizze, K.R. 915.  
 Broce, A.B. 814.  
 Broom, D.M. 1362.  
 Brophy, J.J. 851.  
 Brouwer, J.N. 1415.  
 Brown, H. 995.  
 Brown, K.S. 1091.  
 Brown, M.W. 85.  
 Brown, R.E. 1346.  
 Brown, W.V. 843.  
 Browne, L.E. 1246.  
 Brozek, G. 909.  
 Brundin, A. 177, 1434.  
 Brunet, P.C.J. 780.  
 Bruni, B. 220.  
 Brunjes, P.C. 149.  
 Brunke, E.-J. 1497.  
 Brunner, R.L. 1620.  
 Bruno, D.W. 1237.  
 Bryan, B. 1405.  
 Bryant, B. 1064, 1347.  
 Bryant, E.H. 770.  
 Bryant, K.L. 169, 1418.  
 Bucher, G.E. 827.



- Buck, D.R. 819.  
 Budris, J.P. 92.  
 Buehler, M. 1333.  
 Buescher, R.W. 995.  
 Buil, P. 218.  
 Bulantova, H. 1449.  
 Bures, J. 903, 909.  
 Buresova, O. 903.  
 Burger, B.V. 941.  
 Burgett, M. 126.  
 Buriot, D. 1101.  
 Burns, E.E. 973.  
 Burnsides, J.A. 1251.  
 Burt, B. 1407.  
 Buser, H.R. 1249, 1253.  
 Butcher, L.L. 1069.  
 Butcher, R.E. 1620.  
 Butler, E.J. 243.  
 Butler, L.A. 891.  
 Butler, L.I. 809.  
 Butler, R.G. 891.  
 Buttery, R.G. 1535.  
 Byers, J.A. 152, 1246, 1307.  
 Byers, J.R. 1227.  
 Byrne, K.J. 889.  
 Bystrzycka, E.K. 675.  
 Byther, R.S. 1583.  
 Cabanac, M. 686.  
 Caddy, G.R. 24.  
 Cagan, R.H. 34.  
 Cain, W.S. 676, 1075.  
 Cairncross, K.D. 156, 1123.  
 Caldwell, R.L. 1314.  
 Callily, R. 692.  
 Cameron, E.A. 85, 826.  
 Cammaerts, M.-C. 102.  
 Campbell, A.G. 1021.  
 Campellone, B.E. 1409.  
 Campero, J. 1290.  
 Campion, D.G. 90.  
 Canevet, C. 1444.  
 Cano, M.S. 1293.  
 Cantelo, W.W. 1310.  
 Capinera, J.L. 792.  
 Capretta, P.J. 927.  
 Carde, R.T. 772, 1284, 1289.  
 Cardello, A.V. 268.  
 Carden, P.W. 109.  
 Carlson, D.A. 1319.  
 Carlson, R.B. 112.  
 Carmack, M. 1361.  
 Caro, J.H. 1287.  
 Caron, A.L. 1533.  
 Carpenter, J.A. 258.  
 Carpenter, J.E. 820.  
 Carpenter, Z.L. 281, 1024, 1593.  
 Carr, W.J. 166, 1344, 1409.  
 Carrods, B.B. 87.  
 Carron, R.L. 299.  
 Carter, E. 1584.  
 Carter, N. 155.  
 Carty, B.E. 108.  
 Catalanotto, F.A. 23.  
 Catalanotto, F.A. 163.  
 Cates, K.L. 1185.  
 Cattarelli, M. 1432.  
 Cavill, G.W.K. 851.  
 Cederberg, B. 74, 1317.  
 Cerda, L. 76.  
 Chadha, M.S. 1440.  
 Chaisemartin, C. 1271.  
 Chakraborti, P.C. 117.  
 Chambers, D.L. 1229.  
 Chandan, R.C. 269.  
 Chaneil, J. 1334, 1432.  
 Chang, S.S. 194.  
 Chapman, O.L. 1242, 1243.  
 Chararas, C. 1245, 1268.  
 Chaudhary, F.M. 221.  
 Cheal, M. 938.  
 Cheal, M.L. 175, 1136.  
 Cheek, P.R. 170.  
 Cheng, T.C. 46.  
 Chenoweth, D.E. 290, 1155, 1175.  
 Chernin, E. 66.  
 Chet, I. 64.  
 Cheung, H.T. 726.  
 Chi, C.C. 63.  
 Chiba, H. 1000, 1006, 1007.  
 Chichester, C.O. 1550.  
 Chin-Ting, J. 1015.  
 Chinn, H.R. 1446.  
 Chisholm, M.D. 818, 824, 1227, 1443.  
 Chizar, D. 919.  
 Chong, L. 128, 1288.  
 Christensen, C.M. 134.  
 Christenson, P.A. 207.  
 Christiansen, E. 1349.  
 Christophidis, N. 691.  
 Christou, N.V. 25, 1086.  
 Chuman, T. 775.  
 Chung, R.A. 1584.  
 Church, J.A. 695.  
 Cianciola, L.J. 1099.  
 Cioch, J.J. 1023.  
 Ciovinache, M. 1097.  
 Clandinin, D.R. 242.  
 Clapperton, J.F. 1594, 1595.  
 Clardy, J. 147.  
 Clark, J. 19.  
 Clark, R.A. 1154.  
 Clarke, S. 1215.  
 Claus, H. 1614.  
 Clauss, K. 1508.  
 Clawson, C.C. 1098.  
 Claypool, W.D. 44.  
 Clewell, D.B. 299.  
 Cmiralova, D. 796.  
 Coaker, T.H. 81, 94, 97, 1266.  
 Cockrum, P.A. 87.  
 Coffelt, J.A. 120, 1033, 1228.  
 Cohen, H. 692.  
 Cohen, J.S. 1407.  
 Colas, B. 1556.  
 Coleman, E.C. 1462.  
 Collin, H.A. 955, 1455.  
 Collins, G.G.S. 671, 1130.  
 Collins, J.L. 275.  
 Collins, M.M. 1244.  
 Collison, C. 162.  
 Cone, W.W. 1252, 1560.  
 Connell, D.W. 1008.  
 Conrady, W.J. 1597.  
 Cook, B. 1303.  
 Coombes, S. 1386.  
 Coombs, C.H. 687.  
 Cooney, D.O. 297.  
 Cooper, E.L. 43.  
 Cooper, S.J. 1410.  
 Cordray, J.C. 998.  
 Cornwell-Jones, C.A. 706, 1343.  
 Coster, J.E. 1306.  
 Cottier, H. 1085, 1192.  
 Cowan, I.M.C. 1359.  
 Cox, B. 156, 1123.  
 Coxon, D.T. 1037.  
 Cragg, P.A. 713.  
 Craig, R.A. 299.  
 Cram, A. 1323.  
 Crandall, J.E. 873.  
 Crewe, R.M. 941.  
 Criss, B.R. 888.  
 Croft, B.A. 1284.  
 Cross, H.R. 282, 997, 1567.  
 Crotti, E. 790.  
 Crump, W.J., Jr. 1041.  
 Cruz-Morales, S.E. 1371.  
 Cuatrecasas, P. 715, 737.  
 Cuer, A. 949, 951.  
 Cunningham, C.L. 912.  
 Cuperus, P.L. 1104.  
 Currier, W.W. 1213.  
 Curtis, R.F. 243.  
 Czarnetzki, B.M. 717, 1167.  
 D'Mello, G.D. 1370.  
 Dahan, R. 1292.  
 Dahinden, C. 734.  
 Dahlof, L.-G. 1335.  
 Dahm, K.H. 84.  
 Dalen, A. 1195.  
 Dallegr, F. 1176.  
 Daloze, D. 127.  
 Dalrymple, A.J. 176.  
 Daly, M. 1350.  
 Daly, P.J. 1.  
 Daniele, R.P. 1170.  
 Danziger, J. 21.  
 Darlington, K. 242.  
 Darvesh, S. 765.  
 Daterman, G.E. 828.  
 Dauber, J.H. 1170.  
 Daud, H.B. 255.  
 Dauphin, G. 949, 951.  
 Davidke, J. 960, 1449, 1464.  
 Davies, J.C. 77.  
 Davies, N.W. 851.  
 Davis, H.G. 124.  
 Davis, J.M. 1087.  
 Davis, P.G. 869.  
 Dawson, L.E. 1010.  
 Dawson, W. 728.  
 Daxboeck, C. 1142.  
 Day, A.R. 1194.  
 De Almeida Lima, U. 1574.  
 De Groot, A.J.M. 26.  
 de Quartel, F.W. 1134.  
 De Wit, R.J.W. 750.  
 Debruyckere, M. 1529.  
 Debry, G. 1547.  
 DeFeudis, F.V. 1117.  
 DeFranco, A.L. 56.  
 Degobert, P. 679.  
 Dehghani, G.A. 1145.  
 Delaleu, J.C. 1056.  
 Delanoy, R.L. 1116.  
 Delucchi, V. 838.  
 den Otter, C.J. 2.  
 Den Otter, C.J. 758, 1104.  
 den Ouden, H. 1280.  
 Dennis, E.B. 109.  
 Denslow, J. 1608.  
 Derby, C. 1047, 1272.  
 Derivot, J.H. 703.  
 Descoins, C. 91.  
 DeSimone, J.A. 1048.  
 Dessi-Fulgheri, F. 1335.  
 Dethier, V.G. 100, 1046.  
 DeVilbiss, E.D. 116.  
 Devine, D. 806.  
 Devitsina, G.V. 10.  
 Di Bella, L. 17, 18, 1412, 1413.  
 Dick, T.A. 1258.  
 Dickens, J.C. 4, 668, 853.  
 Dickinson, J.A. 1327.  
 Diehn, B. 756.  
 Dieter, R.K. 147.  
 Dineen, P. 1087.  
 Dirinck, P. 189.  
 Dizinno, G. 1353.  
 Doane, H.M. 872.  
 Dobberstein, R.H. 1509.  
 Dobson, R.C. 1304.  
 Dodd, G. 746.  
 Doig, M.V. 1200.  
 Dole, D.W. 918.  
 Dolinski, M.G. 128.  
 Domato, G.C. 1382.  
 Domesick, V.B. 938.  
 Dominic, C.J. 148.  
 Domjan, M. 1374, 1388, 1401.  
 Donath-Jobbagy, A. 1607.  
 Doolittle, R.E. 1228, 1257, 1448.  
 Doughty, M.J. 65.  
 Douglas, S.D. 723.  
 Douse, J.M.F. 966.  
 Dowdle, E.B. 1177.  
 Drake, S.R. 1560.  
 Drewett, R.F. 871.  
 Drickamer, L.C. 866.  
 Drysdale, D.B. 713.  
 du Villard, X.D. 1415.  
 Ducauze, C. 1268.  
 Dumont, J.P. 949, 951.  
 Dunbar, I. 1333.  
 Dunkelblum, E. 816, 822, 1296.  
 Dunn, A.J. 1116, 1121.  
 Dunn, N.J. 24.  
 Dunn, P.M. 172.  
 Dunny, G.M. 299.  
 Dupe, M. 703.  
 Durkee, E.L. 996.  
 Durlach, P.J. 1383.  
 Durr, P. 1467.  
 Dusa, L. 854.  
 Dutson, T.R. 1024.  
 Dutton, H.J. 1500.  
 Duval, D. 883.  
 Duveau, A. 1125.  
 Duyvesteyn, P. 670.  
 Dvorakova, L. 1449.  
 Earley, C.J. 1387.  
 Edgar, J.A. 87.  
 Edgerly, J.S. 801, 855.  
 Edinger, H.M. 1059.  
 Edman, J.D. 844.  
 Edwards, D.A. 1405.  
 Eichhorn, H. 986.  
 Einhorn, J. 86.  
 Eisner, T. 147.  
 El Salam, I.A. 1616.



- El-Tarras,M.F.M. 251.  
Elkins,R. 900.  
Elliott,R.H. 796.  
Ellner,J.J. 1163.  
Elmenhorst,H. 1489.  
Elsmore,T.F. 1369.  
Engan,S. 1484.  
Engel,M.S. 1313.  
Engen,T. 682.  
Engstrom,P. 743, 1209, 1210.  
Ennis,D.M. 272, 1015.  
Ercanbrack,S.K. 1028.  
Erickson,R.P. 1081.  
Ernst,U. 283.  
Esaki,S. 970.  
Eshima,T. 263.  
Etcheto,M. 1598.  
Etheridge,P. 111.  
Ettenberg,A. 157, 921.  
Evans,C.S. 1261.  
Evans,M.C.W. 54, 1214.  
Evans,M.S. 1323.  
Everton,I.J. 206.  
Eves,J.D. 124.
- Fabsitz,R.R. 1091.  
Fales,H.M. 83.  
Falk,W. 1600.  
Farbood,M.I. 193.  
Farentinos,R.C. 927.  
Fargerlund,J. 72.  
Farnsworth,N.R. 1509.  
Faurion,A. 1082.  
Fava,G. 790.  
Fedler,C. 1531.  
Fefferman,M. 1602.  
Fehr,D. 1488.  
Fehr,J. 734.  
Feinleib,M. 1091.  
Feinsod,F.M. 1035.  
Femano,P.A. 1059.  
Fendesack,F. 199.  
Fenemore,P.G. 88.  
Fenical,W. 147.  
Fenwick,G.R. 243, 294.  
Ferguson,A.W. 795, 841.  
Ferkovich,S.M. 1103.  
Ferrante,A. 1169, 1187.  
Ferris,C.D. 1248.  
Fesenko,E.E. 705.  
Fiaschi,V. 1429.  
Fic,V. 999.  
Fiefel,V.D. 723.  
Fields,M.L. 245, 1014.  
Fikentscher,R. 1074.  
Finch,S. 95, 113.  
Finne,G. 1605.  
Finney,P.L. 1579.  
Finney,R. 751.  
Firtzgerald,T.D. 855.  
Fischbein,L.C. 1190.  
Fischer,T.J. 1102.  
Fish,R.H. 1246.  
Fisher,G.C. 126.  
Fitzgerald,R.S. 42, 1145.  
Fitzgerald,T.D. 801.  
Fitzsimons,J.T. 1403, 1626.  
Flament,I. 1451.  
Flannery,G.R. 159.  
Flath,R.A. 1463.  
Flayoux,R. 1502.  
Fletcher,B.S. 766.
- Flint,H.M. 821, 1290, 1304.  
Flora,L.F. 295.  
Florian,V.A. 1405.  
Foa,A. 1429.  
Folmar,L.C. 1565.  
Forbus,W.R., Jr. 1544.  
Forcellese,M.L. 1498.  
Ford-Hutchinson,A.W. 1165, 1200.  
Forester,D.C. 1338, 1425.  
Forss,D.A. 1453.  
Forster,C. 156, 1123.  
Foster,K. 1388.  
Fox,J.D. 1592.  
Frahm,H.D. 1144.  
Franchina,J.J. 1382.  
Francke,W. 846.  
Franklin,J.B. 1592.  
Franklin,M.E. 1533.  
Frater,G. 1447.  
Frattali,V.P. 1618.  
Frazier,J.L. 13, 1139.  
Frazier,W.A. 61.  
Free,J.B. 795, 841.  
Freeman,H.P. 1287.  
Freeman,N.C.G. 875.  
Freeman,W.J. 1052.  
Freer,R.J. 1182, 1194.  
Frei,P.C. 48.  
Freise,B. 1386.  
French,R.C. 296.  
Frerot,B. 86, 1223.  
Fresneau,D. 698.  
Freter,R. 1216, 1217.  
Fretheim,K. 1613.  
Freuler,J. 1249.  
Friedrich,H. 953.  
Friesle,L. 199.  
Frosch,P.J. 1167.  
Fuhrmann,F. 1277.  
Fujii,Y. 1558.  
Fujimori,T. 1491, 1496.  
Fujimoto,M. 75, 811.  
Fujita,K. 1276.  
Fujiwake,H. 1514.  
Fukawa,S. 1461.  
Fukuda,T. 1131.  
Fukushima,D. 959.  
Funk,W. 986.
- Gaffar,A. 1102.  
Gagnon,C. 739.  
Gala,R.R. 298.  
Galef,B.G., Jr. 876.  
Galef,B.G., Jr. 176.  
Gall,B.G. 777.  
Gallander,J.F. 265.  
Gallin,E.K. 1199.  
Gallin,J.I. 1087, 1199.  
Gallois,M. 86, 91, 1223.  
Galpin,J.J. 955, 1455.  
Gammow,W.R. 1203.  
Gara,R.I. 76.  
Gardner,R.J. 1516.  
Garibaldi,J.A. 1535.  
Garnero,J. 218.  
Garreau,J.-J. 1363.  
Garrett,O.J. 157.  
Garrity,M.P. 92.  
Garruti,R.S. 1017.  
Garza-Ulloa,H. 1478.  
Gasik,A. 1554.
- Gasque,F. 1580.  
Gaston,K.E. 1368.  
Gaston,L.K. 783, 1032.  
Gau,B.A. 1376.  
Gaucherand,M. 1168.  
Gaughwin,M.D. 878.  
Gaulin-Kremer,E. 23.  
Gawienowski,A.M. 1030.  
Gedevani,D.M. 1053.  
Gee,M. 1545.  
Geeraerts,J. 1320.  
Gemberling,G.A. 899, 1401.  
Genco,R.J. 1099.  
Genov,N. 1466.  
Gent,J.F. 20.  
Gentry,C.R. 1285.  
George,J.E. 1303.  
Geotzl,E.J. 1186.  
Gerard,C. 1155.  
Gersch,G. 1202, 1218.  
Germino,F.J. 92.  
Getchell,T.V. 1048.  
Ghander,A.Z. 1092.  
Ghatak,U.R. 117.  
Gheradi,S. 211.  
Ghia,D. 1097.  
Ghori,M. 1506.  
Gibb,J.W. 1143.  
Gibbons,J.L. 1129.  
Gibbs,M.E. 905.  
Gibbs,P.A. 195.  
Gierowska,K. 1554.  
Giersch,W. 1501.  
Giesbrecht,F.G. 1575.  
Gieselmann,M.J. 72, 810, 1241.  
Giesen,M. 1089.  
Gilad,G.M. 1124, 1127.  
Gilbert,R.D. 42.  
Gill,C.O. 1570.  
Gill,K. 1446.  
Gillan,D.J. 153, 1388, 1401.  
Gillenwater,H.B. 123.  
Gilletle,K. 1367, 1372.  
Gilliland,S.E. 1615.  
Gillingham,J.C. 1327.  
Girard,J.E. 92.  
Giron,A. 1240.  
Giroud,J.-P. 52.  
Giroud,J.P. 727, 1193.  
Gladysheva,O.S. 1105.  
Glaser,D. 930.  
Glass,E.J. 1172.  
Glauret,A.M. 1161.  
Glottfely,D.E. 1287.  
Gmelin,R. 1460.  
Gnagy,M. 1173.  
Gnarpe,H. 719, 1195.  
Godbee,J.F. 833.  
Godet,R. 703.  
Godfrey,D.A. 1133.  
Goetzl,E.J. 51, 1160, 1188.  
Goh,Y.K. 242.  
Goldberg,A.M. 1145.  
Goldberg,D.M. 1370.  
Goldberg,S.R. 1370.  
Goldoni,S. 1574.  
Goldstein,I.M. 1088.  
Golias,J. 190.  
Golob,N.F. 946.  
Golovnja,R.V. 1473, 1474.  
Gomez-Ramos,P. 37.  
Gonzalez,C. 1143.
- Gonzalez,L.A. 1398.  
Goodenough,J.L. 814.  
Goodwin,R.H., Jr. 1600.  
Gopakumar,K. 1009.  
Gordon,J.H. 1122.  
Gorman,R.R. 51, 1186.  
Gorski,R.A. 1122.  
Gothilf,S. 816, 822, 1296.  
Goudie,A.J. 898, 913.  
Gould,H.J. 109.  
Gove,D. 933.  
Govindarajan,V.S. 1525.  
Goy,M.F. 1206.  
Gramshaw,J.W. 1610, 1611.  
Granger,R. 220.  
Gray,J.I. 256.  
Gray,R.H. 1566.  
Graziadei,G.A.M. 28, 1137, 1138.  
Graziadei,P.P.C. 28, 1137, 1138.  
Greany,P.D. 1229.  
Green,E.C. 282.  
Green,L. 1394.  
Green,S. 1424.  
Greenberg,S. 816, 1296.  
Greenway,A.R. 137.  
Greger,J.L. 1040.  
Gregoire,J.C. 103.  
Griesemer,H.A. 1382.  
Griffiths,D.C. 137.  
Griffiths,N.M. 1557.  
Grimley,D.L. 925.  
Griscelli,C. 1101.  
Grosch,W. 191, 212.  
Gross,H.R., Jr. 836.  
Grossman,S.P. 1404.  
Groth,K.-D. 1089.  
Grubb,T.C., Jr. 174.  
Grula,J.W. 1233.  
Grunewald,K.G. 196.  
Gruss,L. 1408.  
Gryska,P. 1602.  
Grzegorzczak,P.B. 690.  
Guadagni,D.G. 250.  
Guadans,S.J. 1305.  
Gubler,B.A. 953.  
Guerra,R. 274.  
Guillot,M. 1617.  
Guiochon,G. 292.  
Gunion,M.W. 167.  
Gunstone,F.D. 963.  
Gupta,B.D. 89.  
Gutmann,C. 131.  
Guy,E.J. 1576.  
Gyosheva,B.H. 184.
- Haas,E.-M. 1077.  
Habets,A.M.M.C. 1060, 1134.  
Haevceker,U. 238.  
Hageman,G.R. 1072.  
Hagen,K.S. 836.  
Haines,C.P. 817.  
Hainsworth,R. 1148.  
Hajslova,J. 960.  
Hakansson,L. 1196.  
Halasova,J. 1523.  
Hall,C. 270.  
Hall,D.R. 77, 90, 121, 771.  
Hall,M.J.R. 1265.  
Halliday,J.W. 1174.  
Halpern,B.P. 1526, 1527.  
Halpern,M. 1114.

- Halstead, S.A. 1216.  
Hamad, A.M. 1014.  
Hamburger, J.N. 154, 906.  
Hamilton, J.H. 713.  
Hammerschmidt, F.-J. 1497.  
Hammerschmidt, D.E. 735.  
Hammes, J.K. 249.  
Hammond, E.G. 1531.  
Handley, J.R. 945.  
Hang, Y.D. 984.  
Hangartner, M. 240.  
Haniotakis, G.E. 80.  
Hanna, B.D. 40.  
Hansen, A.P. 1575.  
Hara, T. 187.  
Harayama, S. 55, 743.  
Hardin, R.T. 1587, 1588.  
Harding, J.W. 29, 1399.  
Hardy, R. 963.  
Hargrove, J.W. 114.  
Harper, D.B. 195.  
Harper, R. 688.  
Harris, E.J. 75, 812.  
Harscoat, J.-P. 1556.  
Hart, R.J. 916.  
Hartig, P.R. 747.  
Hartman, D.S. 1435.  
Hartstack, A.W. 819.  
Harvey, T.M. 988.  
Hashimoto, N. 263.  
Hasim, N.B. 245.  
Hata, T. 1491.  
Hatfield, L.D. 13, 1139.  
Hato, M. 62.  
Haug, M. 1351.  
Hausser, J. 1348.  
Havsteen, B. 1492.  
Hawkes, C. 81, 97.  
Hawrysh, Z.J. 1587, 1588.  
Hayashi, H. 45, 57, 58.  
Hayashi, K. 1454.  
Hayashi, S. 1341, 1493.  
Hayashi, T. 1511, 1512.  
Hazelbauer, G.L. 55, 743, 1209, 1210.  
Heath, R.R. 1257, 1439, 1448.  
Heck, G.L. 1048.  
Heckman, S. 1356.  
Hedin, P.A. 1230.  
Hedrick, H.B. 279.  
Heeschen, W. 244.  
Hefetz, A. 857.  
Heinrich, G. 1524.  
Heisler, S. 739.  
Heistad, D.D. 1149.  
Helligren, L. 1195.  
Hendry, L.B. 1246.  
Hengartner, U. 1505.  
Henkin, R.I. 922.  
Hennessy, M.B. 1340.  
Henrick, C.A. 942, 1446.  
Henzi, W. 993.  
Herath, H.M.W. 1521.  
Herbert, D.A. 41.  
Hermayer, K.L. 937.  
Herreid, C.F., II 886.  
Herrmann, A.D. 1133.  
Herrmann, J. 1616.  
Herrmann, K. 1628.  
Hershey, J.L. 1425.  
Hess, M.W. 1085, 1192.  
Heydane, M.G., Jr. 246.  
Hiche, E. 1550.  
Hicks, R.A. 1246.  
Higa, H. 75, 811.  
Higashino, M. 1511, 1512.  
Higgins, R.A. 93.  
Higuchi, Y. 45.  
Hild, J. 183.  
Hildebrand, E. 745.  
Hildebrand, J.G. 84.  
Hildrum, K.I. 1613.  
Hilhorst, R.A. 236.  
Hill, A.S. 78, 833.  
Hill, B.J. 1274.  
Hill, H.R. 1186.  
Hill, R.J. 1238.  
Hines, R.C. 1549, 1591.  
Hinkelmann, K.H. 1418.  
Hintze-Podufal, C. 699.  
Hirai, K. 783.  
Hirano, C. 122.  
Hirsch, J.T. 1409.  
Ho, C.-T. 1462.  
Ho, H. 1330.  
Hobbs, S.H. 900.  
Hobson, A.C. 744.  
Hobson-Frohock, A. 243, 1557.  
Hockman, C.H. 33.  
Hodosan, F. 854.  
Hoes, T.L. 1549, 1591.  
Hoff, J.T. 266.  
Hoffmann, M.P. 118, 829.  
Hoffmann, W. 1510.  
Hoffmann-Walbeck, H.P. 987.  
Hoffstein, S. 733.  
Hofle, G. 1460.  
Hofstad, T. 731, 1191.  
Hogan, J.A. 934.  
Hohl, R. 741.  
Hokimoto, K. 99.  
Holaday, C.E. 1543.  
Holder, C.L. 1343.  
Holeten, G.F. 1142.  
Hollaway, M. 1061.  
Hollers, J.C. 1189.  
Holley, A. 1056, 1057, 1125.  
Hollo, J. 1607.  
Holman, E.W. 1385.  
Honcariv, R. 1523.  
Honig, D.H. 252.  
Honma, N. 188.  
Hood, L.F. 1622.  
Hoover, J.E. 866.  
Hornack, K. 1076.  
Horoszewicz, H.U. 1099.  
Horvat, R.J. 1456.  
Hostetter, R.L. 1024.  
Haupt, K.A. 881.  
Hovenden, J.E. 1024.  
Howden, M.E. 916.  
Howland, K.H. 46.  
Howse, P.E. 136, 146, 1263.  
Hoy, M.A. 1250.  
Hoyem, T. 1613.  
Hsu, D. 1579.  
Hsu, D.H.-L. 1566.  
Huang, W.Y. 241.  
Hubbard, W.C. 1188.  
Huber, I. 106.  
Huber, R.T. 118, 829.  
Hubert, H.B. 1091.  
Huck, U.W. 1328.  
Huffman, D.L. 998, 1551.  
Hughes, R.N. 141.  
Hugli, T.E. 290, 1155, 1175.  
Huheey, J.E. 1396.  
Hummel, G. 1115.  
Hunt, D. 268.  
Hutchison, L.V. 1058.  
Hwang, Y.-S. 1278.  
Ichimura, H. 205.  
Ignee, J.O. 256, 1011.  
Ikeda, M. 1530.  
Iki, I. 198.  
Ina, K. 194.  
Infurna, R.N. 1373, 1381.  
Ingersoll, D.W. 1326, 1352.  
Ingolia, T.D. 748.  
Ingram, W.R. 1291.  
Inoue, M. 1431.  
Ioncheva, N. 1466.  
Iruthayathas, E.E. 1521.  
Isaacson, R.L. 1121.  
Ishida, M. 45.  
Ishihara, K. 188.  
Ishii, Y. 1511, 1512.  
Ishiwatari, T. 1438.  
Islam, M.Z. 1255.  
Islam, S. 914.  
Ismail, H.H. 1609.  
Issekutz, A.C. 49.  
Itagaki, H. 789.  
Ivakhniuk, I.S. 803.  
Ivastschenko, I.I. 784.  
Iversen, O.-J. 1195.  
Iwai, K. 1514.  
Iyengar, R.B. 208.  
Izquierdo, J. 904.  
Izquierdo, L. 954.  
Jaccarini, V. 1322.  
Jackowski, S. 740.  
Jackson, J. 1437.  
Jacob, J. 150.  
Jacobowitz, D.M. 1118.  
Jacobsen, T. 1484.  
Jacobson, M. 811, 822, 1310.  
Jacobson, S. 1256.  
Jallon, J.-M. 769.  
James, S.L. 1180.  
James, T.N. 1072.  
Jander, R. 858.  
Jander, U. 858.  
Janig, W. 1071.  
Jansson, A. 140.  
Jardula, M.F. 1373.  
Jarman, M.V. 896.  
Jarrot, B. 691.  
Jellinek, J.S. 1073.  
Jemiolo, B. 1329.  
Jen, T.-L. 846.  
Jermy, T. 69.  
Jersild, R. 729.  
Ji, Y.-D. 82.  
Jing, B.-S. 21.  
Joel, D.L. 1569.  
Jofre, C. 1398.  
Joh, Y. 1622.  
Johannson, B. 232.  
Johansson, E. 1181.  
Johnson, D.W. 47.  
Johnson, E. 1362.  
Johnson, K.K. 1505.  
Johnson, M.F. 884.  
Johnson, P.C. 1306.  
Johnson, P.E. 899.  
Johnson, W.I. 1230.  
Johnston, B.D. 945.  
Jolicoeur, F.B. 1377, 1390.  
Jones, D.R. 39.  
Jones, F. 22.  
Jones, H.E., Jr. 1549.  
Jones, M.D.R. 1305.  
Jones, M.L. 44.  
Jones, O.T. 94, 1266.  
Jones, P.G. 1037.  
Jones, R.A. 1241.  
Jones, R.B. 935, 936.  
Jones, R.L. 785.  
Jones, S.W. 690.  
Jones, T.L. 1601.  
Joosse, E.N.G. 1315.  
Jordens-Rottger, D. 793.  
Jorgenson, J.W. 1361.  
Joseph, A.L. 1567.  
Josephson, R.V. 1020.  
Joshi, B.G. 1295.  
Joulain, D. 218.  
Jourdan, F. 1125.  
Jouvenaz, D.P. 1319.  
Judge, M.D. 280, 1023.  
Juge, A. 1056, 1057.  
Juhlin-Dannfelt 1348.  
Juliano, B.O. 1264.  
Jungi, T.W. 1171.  
Jungova, O. 999.  
Junk, G. 1531.  
Kagan, M.Z. 180.  
Kahan, J. 993.  
Kahane, I. 715.  
Kakebeek, P.I.J. 750.  
Kakuta, K. 187.  
Kalia, M. 1146.  
Kallquist, L. 895.  
Kameoka, H. 980.  
Kaminski, E. 1537.  
Kamiya, S. 970.  
Kamiya, T. 38.  
Kamm, J.A. 1224.  
Kamo, N. 1050, 1063.  
Kamperschroer, H. 196.  
Kaneko, H. 1491, 1496.  
Kanno, H. 1232.  
Kanno, Y. 1140.  
Kaplan, S.M. 228.  
Karel, M. 1561.  
Karim, A. 219, 223.  
Karim, F. 1148.  
Karlan, M.S. 1137, 1138.  
Karlssohn, J. 780.  
Karlstrom, B. 277.  
Karnofsky, E. 1256.  
Kasahara, K. 1471, 1472.  
Kashiwagura, T. 1050.  
Kasperek, M. 1537.  
Kato, K. 775, 1491, 1496.  
Katsir, Z. 941.  
Kauer, J.S. 31.  
Kavas, A.F. 720.  
Kawaguchi, M. 1511, 1512.  
Kawamura, Y. 1067.  
Kawasaki, H. 1126.  
Kay, A.B. 1172.  
Kealey, K.S. 235.  
Keedy, D.A. 1030.



- Keens,T.G. 695.  
 Keeping,L. 1015.  
 Keeton,W.T. 937.  
 Kehat,M. 816, 822, 1296.  
 Keighley,P. 54.  
 Keller,H.U. 724, 1085, 1192, 1202.  
 Keller,K.H. 1201.  
 Keller,U. 1463.  
 Kemp,J.D. 1592.  
 Kennedy,L.M. 1526, 1527.  
 Kenney,E.B. 738.  
 Kenney,N.J. 1414.  
 Kepner,R.E. 1479.  
 Kergomard,A. 949, 951.  
 Ketelsen,A.T. 47.  
 Khail,A.F. 1290.  
 Khan,S.A. 217.  
 Khettry,A. 982.  
 Kiefer,H. 920.  
 Kiefer,S.W. 907.  
 Kielwagen,S. 1074.  
 Kiepenheuer,J. 1430.  
 Kier,L.B. 1515.  
 Kieu-Thu,C. 1564.  
 Kikuchi,T. 1503.  
 Kilpatrick,S.J. 1345.  
 Kim,H.S. 1615.  
 Kim,Y. 735, 1158.  
 Kim,Y.H. 1136.  
 Kim,Z. 1157.  
 Kimble,D.P. 901.  
 Kimura,I. 716.  
 Kincaid,R.L. 753, 754.  
 King,A.C. 61.  
 King,B.M. 1404.  
 King,J.A. 256.  
 King,R.H. 1417.  
 Kinnel,R.B. 147.  
 Kinney,L. 1402, 1620.  
 Kinsella,J.E. 235.  
 Kinzer,G. 1481.  
 Kirchhof-Glazier,D.A. 1339.  
 Kirsop,B.H. 1571.  
 Kirton,A.H. 1021.  
 Kitabatake,N. 1000, 1007.  
 Kitahara,T. 1490.  
 Kitano,H. 73.  
 Kitchen,E.A. 728.  
 Kleene,S.J. 744.  
 Klein,D.R. 168.  
 Kliemenko,V.M. 909.  
 Klinger,I. 1585.  
 Klop,W. 236.  
 Klug,J. 1528.  
 Klun,J.A. 778, 820, 1242, 1243.  
 Knight,D.W. 206.  
 Knight,H. 1016.  
 Knight,J.W. 1418.  
 Kobal,G. 1093, 1094.  
 Kobatake,Y. 1050, 1063, 1219, 1220, 1222.  
 Kobayashi,A. 850, 1312.  
 Kochert,G. 1041.  
 Koelman,T.A.C.M. 1315.  
 Kogan,A.S. 803.  
 Koh,J.-B. 82.  
 Koh,M.S. 1166.  
 Kohn,M. 775.  
 Kohtz,S.D. 750.  
 Koivistoinen,P. 1546.  
 Koivurinta,J. 1546.  
 Koivai,O. 57.  
 Koizumi,T. 187.  
 Kolb,A. 1135, 1436.  
 Koller,W.-D. 1005.  
 Koller,W.D. 276.  
 Kolta,R. 1621.  
 Koman,A. 55, 743.  
 Konig,W. 1198.  
 Konijn,T.M. 750.  
 Konishi,F. 970.  
 Kopelman,I.J. 1001.  
 Koptur,S. 800.  
 Kornegay,E.T. 169, 1418.  
 Korschgen,B.M. 284.  
 Korytin,S. 173.  
 Koshioka,M. 1511, 1512.  
 Koshland,D.E.-Jr. 1204, 56, 59, 291, 742, 747, 748, 1205, 1215.  
 Kosikowski,F.V. 1538, 1539.  
 Kossa,T. 200.  
 Koster,E.P. 1073.  
 Kutenkova,E.V. 1342.  
 Kouwenhoven,T. 1022.  
 Kowalski,B.R. 1596.  
 Kozel,T.R. 722.  
 Kozlowski,K. 1329.  
 Kozuka,M. 57.  
 Kraai,J.H. 738.  
 Krafft,B. 1031.  
 Kraft,A.A. 1586.  
 Krahmer,E. 76.  
 Kraitnz,F.W. 926.  
 Kraitnz,L. 926.  
 Kramer,W.L. 1236, 1278.  
 Krapivinskaya,L.D. 705.  
 Kredich,N.M. 53.  
 Kreis,R.D. 230, 231.  
 Kreithen,M.L. 1427.  
 Krensdorf,D.L. 1020.  
 Kresel,J.J. 908.  
 Kreutzer,D.L. 44, 1183.  
 Krieger,A.J. 288.  
 Krieger,N.R. 708.  
 Krizkova,L. 757.  
 Kroyer,G. 971.  
 Kruse,H.-P. 1475.  
 Krzynomow,J. 1548.  
 Kubelka,V. 960.  
 Kubic,J.L. 1114.  
 Kubota,K. 1470.  
 Kugler,C. 859.  
 Kukushkina,D.M. 1105.  
 Kulka,K. 214.  
 Kulp,J. 1555.  
 Kumakura,M. 70.  
 Kurihara,K. 1050, 1063, 1222.  
 Kurkela,R. 1546.  
 Kusano,T. 1141.  
 Kushida,T. 1486.  
 Kutscher,C.L. 154, 906.  
 Kuwahara,Y. 781.  
 Kuznetsov,V.B. 1150.  
 Kuznicki,J.T. 16, 1080.  
 Kvenberg,J. 120.  
 Kwan,W.-O. 1596.  
 Kwasny,H. 197.  
 Kwok,Y. 1143.  
 Labanick,G.M. 1396.  
 Labows,J.N. 969.  
 Lachman,L. 715.  
 Lafuente,B. 1580.  
 Lahiri,S. 1070.  
 Lakshman,L. 798.  
 Lalasidis,G. 209.  
 Lamprecht,J. 1360.  
 Land,D.G. 243, 677, 1557.  
 Landauer,M.R. 166, 1344.  
 Lane,T.A. 1175.  
 Langer,R. 1602.  
 Langguth,A. 1437.  
 Langguth,C. 768.  
 Langlois,B.E. 1592.  
 Lanier,G.N. 5, 6.  
 Lanzi,G. 1176.  
 Lapwood,K.R. 709.  
 Larscheid,M.E. 1505.  
 Larsen,L.M. 802.  
 Larson,H.E. 1100.  
 Larsson,K. 1335.  
 Laseter,J.L. 241.  
 Lasztity,R. 1621.  
 Latymer,Z. 1061.  
 Laubie,M. 1147.  
 Lauffenburger,D. 1201.  
 Laukner,I. 1074.  
 Lauren,D.R. 815.  
 Laurence,B.R. 1237.  
 Lavin,M.J. 1386.  
 Law,B.A. 947.  
 Lawless,H.T. 15.  
 Lawrence,B.M. 215.  
 Lawrence,C.D. 1380.  
 Lawrence,R.C. 990.  
 Lawson,K. 138.  
 Laxalt,K.A. 722.  
 Layrand,D.B. 752.  
 Le Berre,M. 107.  
 Le Magnen,J. 902, 911.  
 Le Moli,F. 1308.  
 Le Roux,M. 941.  
 Leadbetter,G. 179.  
 Leamaster,B.R. 170.  
 Leander,J.D. 1376.  
 Leather,G.R. 296.  
 Leder mann,S. 1469.  
 Lee,C.-T. 1326, 1352.  
 Lee,G.H. 1242, 1243.  
 Lee,H.K. 923.  
 Lee,J. 82.  
 Lee,J.S. 1541.  
 Lee,K.R. 82.  
 Lee,Y.C. 249.  
 Leeper,P.W. 973.  
 Leggett,J.E. 110.  
 Lehmann,G. 261.  
 Lehtonen,M. 202.  
 Leimgruber,A. 48.  
 Leonard,B.E. 1387.  
 Leonard,C.M. 873.  
 Leonard,E.J. 1600.  
 Leonardos,G. 988.  
 Lepone,G. 1242, 1243.  
 Leppanen,O. 1608.  
 Lester,R. 77, 121, 771.  
 Lester,S.J. 1624.  
 Lettere,M. 91.  
 Letunov,V.N. 803.  
 Leung,H.K. 1579.  
 Leuthold,R.H. 1270.  
 Levine,R.R. 28.  
 Levine,S. 1340.  
 Levine,S.P. 988.  
 Levinson,A.R. 846.  
 Levinson,H.Z. 846.  
 Lewis,M.E. 1403.  
 Lewis,W.J. 101, 836.  
 Leyden,J.J. 969.  
 Li,J. 1340.  
 Liao,C.S. 1182.  
 Liao,H. 1625.  
 Liardon,R. 961, 1469.  
 Libbey,L.M. 845, 1582.  
 Licht,L.A. 1532.  
 Likhonos,F.D. 992.  
 Lilly,C.E. 818.  
 Lin,H.-S. 1589.  
 Lind,M.D. 158.  
 Lindahl,K.Q. 1281.  
 Lindsay,R.C. 1458, 1459.  
 Link,A.S., Jr. 1197.  
 Lioy,F. 40.  
 Liscia,A. 701.  
 Ljungqvist,A.-C. 277.  
 Lloyd,S.L. 137.  
 Lobato,J.F.P. 929.  
 Lockwood,A.P.M. 1039.  
 Loew,F.M. 164.  
 Lofgren,C.S. 1319.  
 Lofqvist,J. 140, 1239.  
 London,R.M. 165.  
 Longman,G. 765.  
 Longhurst,C. 136, 146, 1263.  
 Lopes da Silva,F.H. 1134, 1060.  
 Louis,W.J. 691.  
 Love,R.M. 254.  
 Lozzia,G.C. 1279.  
 Lu,J.Y. 1584.  
 Lubbock,R. 807.  
 Lucas,J.S. 916.  
 Lundgren,B. 277.  
 Lupo di 1335.  
 Luttmers,L.L. 167.  
 Luzzardo,M.B. 1095.  
 Lyashenko,N.I. 210.  
 Ma,W.-C. 7.  
 Maarse,H. 204.  
 MacLeod,P. 1082.  
 Macadar,A.W. 1058.  
 MacConnell,J.G. 945.  
 MacDonald,D.W. 893.  
 Machamer,P.K. 286.  
 MacLeod,A.J. 1004.  
 Macleod,I. 1513.  
 MacNeil,J.H. 193.  
 MacPhail,R.C. 1369.  
 Macsai,M.S. 1217.  
 Madsen,H.F. 108.  
 Maga,J.A. 273.  
 Magnavacca,C. 1334.  
 Mahakun,N. 973.  
 Mahmoud,R.M. 950.  
 Maier,H.G. 948.  
 Maini,S. 778, 1294.  
 Maitre,M. 1117.  
 Makinen,V. 964.  
 Makoi,Z. 172.  
 Malchev,E. 1466.  
 Malten,K.E. 696.  
 Malz,D. 699.  
 Mampapur,V.R. 1440.  
 Mandel,P. 1117.

- Mandell, B. 733.  
Mandell, G.L. 721.  
Mann, B. 268.  
Manning, D.J. 185, 186.  
Mansard, C. 1364.  
Mansour, T.E. 753, 754.  
Marasco, E. 166, 1344, 1409.  
Marasco, E.M. 706.  
Marchlewska-Koj, A. 1329.  
Marcin, A. 1449.  
Marfaing-Jallat, P. 902, 911.  
Marin-Cao, D. 749.  
Marin, H. 269.  
Mariotti, G. 1429.  
Marjan, Z.M. 1568.  
Marks, D.H. 43.  
Marler, P. 1424.  
Marques, D.M. 874, 1332.  
Martin, A.P. 111.  
Martin, D.L. 1199.  
Martin, G.M. 1367, 1372.  
Martin, L.T. 1380.  
Martini, A.J. 922.  
Martymova, G.I. 1105.  
Maschwitz, U. 131.  
Mason, J.R. 1366.  
Massari, V.J. 1118.  
Masuda, M. 1480.  
Mato, J.M. 749.  
Matschinsky, F.M. 1133.  
Matsuda, K. 850, 1312.  
Matsufusa, K. 1470.  
Matsui, M. 1490.  
Matsumoto, N. 1581.  
Matsumoto, S. 736, 1156.  
Matsuo, R. 1067.  
Matthay, R.A. 1159.  
Matveeva, N.B. 752.  
Maximova, O.A. 805.  
Mayer, A.D. 875, 877.  
Mazza, G. 1457.  
McBride, R.L. 270.  
McBurney, D.H. 20.  
McCall, C.E. 1197.  
McCarty, F.A. 1282.  
McChesney, J.D. 1233.  
McClelland, A. 1410.  
McCullough, J.J. 1162.  
McCutcheon, N.B. 16.  
McDonald, L.L. 123.  
McDonough, L.M. 124, 809, 821, 1224.  
McElroy, A.E. 1081.  
McFarlane, I.D. 1324.  
McGill, A.S. 963.  
McGinley, K.J. 969.  
McGovern, T.P. 123.  
McGowan, C.L. 983.  
McGregor, D.D. 1171.  
McIntosh, T.K. 869.  
McKibben, G.H. 1230.  
McLain, D.K. 1298.  
McLaughlin, C.L. 1422.  
McLaughlin, J.R. 1247, 1257.  
McLean, J.A. 115, 133.  
McMeekin, T.A. 255.  
McMillan, W.W. 105.  
McNeil, J.J. 691.  
McVeigh, L.J. 90.  
Meacock, S.C.R. 728.  
Meakins, J.L. 25, 1086.  
Meinwald, J. 147.  
Meisami, E. 707.  
Melzacka, M. 1128.  
Menco, B.P.M. 670.  
Mendehall, V.T. 1028.  
Meredith, M. 1332.  
Merkel, A.D. 1377, 1390.  
Merrill, W.W. 1159.  
Merriman, V.J. 158.  
Mertens, J. 1316.  
Meunier, J.M. 965.  
Meyerdirk, D.E. 832.  
Meyerson, B.J. 1354.  
Miceli, D. 902.  
Michaelakis, S. 90.  
Miller, D.M., III 1207.  
Miller, J.B. 742, 1205.  
Miller, P.L. 856.  
Mills, J.H.L. 1624.  
Milner, P.M. 157.  
Milsom, W.K. 39.  
Min, D.B.S. 194.  
Minarik, E. 999.  
Miner, J.R. 229, 1532.  
Minnick, D.R. 1247.  
Mintz, R.B. 1390.  
Miskiewicz, M.A. 1038.  
Misslin, R. 1117.  
Mistretta, C.M. 690, 1068.  
Mitchell, E.B. 1230.  
Mitchell, E.R. 1297.  
Mitchell, R. 64.  
Mitchell, R.A. 41.  
Mitsuda, H. 1558.  
Miyahara, T. 1511, 1512.  
Miyazawa, M. 980.  
Mizutani, J. 956.  
Moety, E.M.A. 251.  
Moglich, M. 135.  
Moitoza, D.J. 1273.  
Mokashi, A. 1070.  
Moll, C. 191.  
Moll, M. 1502.  
Mollevanger, W.J. 1060.  
Moltz, H. 1345.  
Mon, T.R. 1463.  
Monroe, B. 161.  
Montastruc, P. 1395.  
Montesinos, M. 1580.  
Montgomery, M.W. 1582.  
Monti Graziadei, G.A. 28, 1137, 1138.  
Montuschi, M. 257.  
Moore, B.P. 843.  
Moore, L. 118.  
Mooser, G. 1066.  
Morad, M.M. 1579.  
Moreno, D.S. 72.  
Morgan, J.P. 996.  
Mori, K. 178, 787.  
Morley, J.S. 1504.  
Morris, D.M. 1010.  
Morris, J.A. 982.  
Morrison, R.D. 1615.  
Mosini, V. 1498.  
Moskowitz, H.R. 689.  
Mossing, T. 895.  
Mossman, K.L. 922.  
Motoyoshi, K. 978.  
Mottar, J. 1012.  
Mousavi, R. 707.  
Moussa, M.A. 1277.  
Mouzin, T.E. 1251.  
Mrowinski, D. 1089.  
Mukharji, S.P. 798.  
Mulkern, G.B. 112.  
Mulla, M.S. 1236, 1278.  
Muller, N. 1510.  
Muller-Schwarze, D. 895, 1356.  
Mulligan, E. 1070.  
Mullinix, B.G. 820.  
Mulnix, E.J. 260.  
Mumma, R.O. 130, 1034.  
Munakata, S. 1612.  
Muneoka, Y. 1140.  
Munir, A. 219.  
Murase, M. 259.  
Murphy, C.E. 1593.  
Murphy, C. 1075.  
Murua, R. 1398.  
Muscoplat, C.C. 47.  
Muse, D. 282, 997.  
Mustaparta, H. 5.  
N'Galamulume-Treves, M. 1460.  
Naegel, G.P. 1159.  
Nagasawa, M. 959.  
Nagy, J.G. 171, 1419, 1522.  
Nail, B.S. 675.  
Nair, P.G.V. 1009.  
Nakagawa, S. 811, 812.  
Nakahara, H. 939.  
Nakajima, S. 1411.  
Nakamura, M. 1454.  
Nakasugi, F. 1276.  
Nakayama, M. 736, 1156.  
Nakrani, K.B. 269.  
Namba, Y. 264.  
Nanjundiah, V. 60.  
Naoshima, Y. 1493.  
Narasimhan, S. 1525.  
Narodny, L. 1623.  
Naudts, M. 1012.  
Negishi, T. 1438.  
Negoescu, I. 1097.  
Negrao, N. 1433.  
Nelson, A.I. 1562.  
Nelson, R.D. 723.  
Nemec, P. 757.  
Nesbit, M.E. 1098.  
Nesbitt, B.F. 77, 90, 121, 771.  
Neukermans, G. 1529.  
Newell, I.M. 832.  
Newhart, A.T. 130, 1034.  
Newton, K.G. 1570.  
Ney, K.H. 247, 975.  
Ng, K.T. 1391.  
Ng, M. 49.  
Ngaba, P.R. 1541.  
Nickelson, R., II 1605.  
Niclausa, M. 1502.  
Nicolaus, G. 1489.  
Nicoletti, R. 1498.  
Niedel, J. 715, 737.  
Nielsen, J.-K. 802.  
Nielsen, J.K. 104, 1260.  
Nilsson, L.A. 1300.  
Nishibori, K. 1471, 1472.  
Nishimoto, K. 1493.  
Nishimura, K.-I.C. 1480.  
Nishino, C. 667, 1445.  
Nishino, T. 1070.  
Nitschmann, J. 68.  
Nitta, K. 1581.  
Noble, A.C. 1552.  
Noguchi, M. 775.  
Nollen, P.M. 1221.  
Nomura, H. 1065.  
Nomura, S. 1140.  
Nonaka, J. 1564.  
Nonnamaker, B.J. 1040.  
Noomen, P.J. 293.  
Nordlund, D.A. 101, 836.  
Norin, T. 140.  
Norris, D.A. 1084.  
Norton, H.W. 1027.  
Norval, R.A.I. 1299.  
Novak, J. 190.  
Novak, L. 1225.  
Novin, D. 1069.  
Novoselov, V.I. 705.  
Novotny, M. 1361.  
Numata, A. 99.  
Nunez, M.A. 273.  
Numomura, N. 1468.  
Nyby, J. 1353.  
O'Brien, P.C.M. 1216, 1217.  
O'Connell, R.J. 867, 1332.  
O'Fallon, J.V. 29.  
O'Flaherty, J.T. 1178, 1183.  
O'Mahony, M. 1078, 1083, 1555.  
O'Neal, M. 695.  
Oates, J.A. 1188.  
Oberlander, H. 1033.  
Odum, L.F. 1084.  
Oehlschlager, A.C. 128, 1288.  
Oelofsen, B.W. 1112.  
Ogunbameru, B.O. 1418.  
Ohara, J. 928.  
Ohba, M. 58.  
Ohba, T. 264.  
Ohinata, K. 75, 811.  
Ohloff, G. 1451, 1501.  
Ohsumi, T. 1499.  
Ohta, Y. 1530.  
Oka, Y. 1108.  
Okada, Y. 30.  
Okaka, J.C. 1002, 1003.  
Oleszko-Szuts, S. 1256.  
Oliver, R.C. 1161.  
Oliveros-Belardo, L. 1520.  
Oloo, G.W. 1270.  
Olson, J.S. 1207.  
Olstad, S. 1613.  
Olton, D.S. 162.  
Ono, M. 972.  
Ono, T. 782.  
Opdyke, D.L.J. 976, 977.  
Opreanu, I. 854.  
Oracca-Tetteh, R. 994.  
Orchard, R.D. 828.  
Ormrod, R.P. 1521.  
Orr, W. 1183.  
Otegui, J.T. 940.  
Otsuka, K. 198.  
Otsuka, S.-I. 928.  
Otte, I. 244.  
Ough, C.S. 1572.  
Owen, D.H. 286.  
Page de Bartolucci, D.P. 1013.  
Pager, J. 1406.  
Palaniswamy, P. 762, 764.



- Pallotti, G. 1294.  
 Pandey, S.D. 148.  
 Pangborn, R.M. 22.  
 Panneck, W. 1167.  
 Pant, N.C. 1267.  
 Paoni, N.F. 291.  
 Papi, F. 1429.  
 Parente, L. 1166.  
 Park, M.-t. 82.  
 Parkinson, J.S. 56, 1208.  
 Parrish, F.C., Jr. 281.  
 Parrish, F.W. 19.  
 Parry, R.P. 1100.  
 Passetti, M. 1308.  
 Pasteels, J.M. 127.  
 Pathak, M.D. 1264.  
 Patrone, F. 1176.  
 Patsiokas, A.T. 1382.  
 Patterson, R. 1601.  
 Patton, S. 97.  
 Paulus, K. 1077, 1079.  
 Pavlik, A. 1132.  
 Payne, E. 1021.  
 Payne, T.L. 84, 1282.  
 Pazhetnov, V.S. 880.  
 Pearce, G.R. 929.  
 Pearson, A.M. 256, 272, 1011.  
 Pearson, A.W. 243.  
 Pearson, D. (deceased) 237.  
 Pearson, J.L. 1543.  
 Pecoud, A. 48.  
 Peddle, C. 1378.  
 Pedigo, L.P. 93.  
 Pedrielli, R. 257.  
 Pelerin, G. 1494, 1495.  
 Penniman, J. 993.  
 Peppard, T.L. 966.  
 Pereira, J.S.C. 1433.  
 Perez, H.D. 1088.  
 Perry, G.C. 892.  
 Persellin, R.H. 732.  
 Persson, S. 719.  
 Peters, R.H. 167.  
 Petersohn, R.A. 1586.  
 Peterson, C.E. 1458, 1459.  
 Peterson, P.K. 735, 1158.  
 Peterson, R.J. 194.  
 Pevzner, R.A. 712.  
 Peyron, L. 220.  
 Pfab, I. 1524.  
 Pfaffmann, C. 867.  
 Pham Huu, T. 1101.  
 Philipposian, G. 961.  
 Phillips, B.A. 947.  
 Phillips, D.W. 1273.  
 Phillips, F.T. 111.  
 Phillips, J.G. 19.  
 Phleger, C.F. 1020.  
 Piatek, B. 1246.  
 Pickett, J.A. 841.  
 Pieper, D.R. 298.  
 Pierce, H.D. 1288.  
 Pierce, H.D., Jr. 128.  
 Pietra, P. 701.  
 Piggott, J.R. 1594, 1595.  
 Piggott, F. 1505.  
 Pike, M.C. 53, 1164.  
 Pikk, H.E. 1004.  
 Pilnik, W. 1563.  
 Pitcher, D.G. 947.  
 Pitman, G.B. 129.  
 Pizza, A. 257.  
 Plasa, L. 1426.  
 Platia, G. 1294.  
 Plattig, K.-H. 1093.  
 Plattig, K.H. 1094.  
 Plimmer, J.R. 116, 179, 1242, 1243, 1285.  
 Ploem, J. 724.  
 Plotkin, H.C. 142.  
 Pluthero, F.G. 848.  
 Podhradsky, D. 1523.  
 Podi, M. 211.  
 Poe, S.L. 1247.  
 Pokorny, J. 1449, 1452.  
 Polosa, C. 40.  
 Polyakis, J. 90.  
 Porter, R.H. 872.  
 Potter, N.N. 1002, 1003.  
 Powell, L.W. 1174.  
 Prager, M.J. 1038.  
 Prakash, I. 1389.  
 Prechel, D.P. 1221.  
 Preti, G. 889.  
 Prezant, R.S. 1325.  
 Price, K.R. 1037.  
 Price, S. 1048.  
 Priesner, E. 91, 1223, 1253.  
 Primiani, M. 1242, 1243.  
 Primrose, S. 746.  
 Proveaux, A.T. 1448.  
 Puhvel, S.M. 1153.  
 Punter, P.H. 670.  
 Pushparaj, N. 1092.  
 Quie, P.G. 735, 1158, 1185.  
 Quinn, J.R. 1371.  
 Quinn, W.G. 847.  
 Quiocho, F.A. 1207.  
 Rabin, M.D. 1366.  
 Raccach, M. 260.  
 Rackis, J.J. 252.  
 Radding, J.A. 1194.  
 Raderman-Little, R. 35.  
 Radtke, R. 239.  
 Rafique, M. 221.  
 Railkin, A.I. 803.  
 Raisman, G. 704.  
 Rajalakshmi, B. 1525.  
 Rajalakshmi, D. 1525.  
 Rajashekarapara, B.J. 842.  
 Rajon, D. 1057.  
 Rajotte, E.G. 79.  
 Ramamurthy, R. 1029.  
 Ramaswami, A.M. 1029.  
 Ramsey, C.B. 1549, 1591.  
 Ranganathan, M. 1029.  
 Rao, M.J.B.K. 1042.  
 Rao, V.N.M. 295.  
 Rauch, P.A. 1281.  
 Rausch, L.J. 1058.  
 Rauscher, S. 1253.  
 Ravestien, P. 208.  
 Ray, A. 683.  
 Rayburn, W.R. 968.  
 Reagan, J.O. 258.  
 Rechav, Y. 1299.  
 Records, J.C., Jr. 112.  
 Redick, J.H. 1414.  
 Reed, K.J. 718.  
 Regelin, W.L. 171, 1419, 1522.  
 Regenstein, J.M. 260.  
 Regev, S. 1252.  
 Reid, L.D. 158, 1371.  
 Reiger, I. 1358.  
 Reilly, D. 1076.  
 Reilly, P. 1047.  
 Reineccius, G.A. 1036.  
 Reinefeld, E. 987.  
 Reiner, L. 201.  
 Reinhold, V.N. 51.  
 Reinstein, D.K. 1121.  
 Reis, D.J. 1124, 1127.  
 Reisch, A.M. 1079.  
 Renou, M. 91.  
 Renwick, J.A.A. 129, 853.  
 Repcak, M. 1523.  
 Repine, J.E. 1098.  
 Rescorla, R.A. 1383.  
 Reulecke, T. 768.  
 Revolon, C. 1268.  
 Revusky, S. 1378.  
 Reynolds, H.Y. 1159.  
 Rhyu, H.Y. 226, 981.  
 Ricardo, J.A. 1433.  
 Rice, R.E. 1241.  
 Richards, W. 695.  
 Richerson, J.V. 1282.  
 Richters, G. 208.  
 Rimm, D.C. 24.  
 Ritter, W.F. 1534.  
 Rittschof, D. 1321.  
 Roach, M. 297.  
 Roba, J. 127.  
 Robbers, J.E. 236.  
 Robblee, A.R. 242, 1587, 1588.  
 Robertet, P. 218.  
 Roberts, I.M. 66.  
 Robinson, L. 267.  
 Robinson, R.K. 271.  
 Roch-Arveiller, M. 52, 727, 1193.  
 Rockland, L.B. 994.  
 Rodel, W. 1475.  
 Roder, T. 1444.  
 Rodriguez-Echandia, E.L. 37.  
 Roelofs, W.L. 72, 78, 810, 833, 1241.  
 Roemhild, G. 1254.  
 Roger, S. 951.  
 Rogers, R.C. 1069.  
 Rohwedder, W.K. 1500.  
 Rol, W. 236.  
 Roland, C. 1031.  
 Roller, H. 84.  
 Rondeau, D.B. 1377, 1390.  
 Ronkainen, P. 1608.  
 Roozen, J.P. 285, 1563.  
 Roschke, M. 1528.  
 Rose, B. 1084.  
 Roseburg, B. 1074.  
 Rosen, B. 1001.  
 Rosenblatt, J.S. 875, 877.  
 Rosenblum, L.A. 1365.  
 Rosengren, J.-E. 21.  
 Ross, C.D. 1133.  
 Ross, D.A. 254.  
 Ross, D.M. 862.  
 Ross, K.D. 19.  
 Ross, N. 1015.  
 Ross, R.J. 762, 765.  
 Rossi, F. 1550.  
 Rossi, J.C. 220.  
 Rossi, M.T. 17, 18, 1412, 1413.  
 Rossy, P.A. 1510.  
 Rothe, M. 1474, 1542.  
 Rotundo, G. 1032.  
 Rowe, J.G. 290, 1175.  
 Roy, M.A. 915.  
 Royet, J.-P. 1406.  
 Rozin, P. 684, 1408.  
 Rudinsky, J.A. 845, 1283, 1311.  
 Rummel, G. 1113.  
 Rusev, P. 184.  
 Rust, R.E. 1586.  
 Rutledge, L.C. 1277.  
 Rutowski, R.L. 1234.  
 Ryan, M.F. 1.  
 Ryker, L.C. 845, 1283.  
 Sabo, F.E. 63.  
 Sachs, L. 1151.  
 Saenz, C. 1580.  
 Saguy, I. 1561.  
 Saito, M. 30.  
 Saito, S. 1082.  
 Sakakibara, H. 1454.  
 Sakakibara, M. 787.  
 Sakamoto, M. 1153.  
 Sakamura, S. 1264.  
 Sakuma, H. 1499, 1612.  
 Sala, M.A. 940.  
 Salathe, R. 916.  
 Saleem, M. 217.  
 Salik, H. 1001.  
 Salter, S.S. 821, 1304.  
 Sam, R.M. 1587, 1588.  
 Sambras, H.H. 1400.  
 Sanchez-Criado, J.E. 32.  
 Sanchez, J.F. 275.  
 Sander-van Oosten, A. 2.  
 Sanders, C.J. 813.  
 Sandra, P. 189.  
 Sapru, H.N. 288.  
 Sartwell, C. 828.  
 Sarwar, M. 217.  
 Sasaki, H. 1581.  
 Sasaki, M. 1468.  
 Sasaki, R. 1000, 1006, 1007.  
 Sato, A. 1232.  
 Sato, M. 978.  
 Sato, R. 70.  
 Sato, S. 264.  
 Sato, T. 1051.  
 Sato, Y. 125.  
 Sauls, C.E. 101.  
 Sauvageot, F. 1556.  
 Savell, J.W. 281, 1551.  
 Scalera, G. 17, 18, 1412, 1413.  
 Schaeffer, C. 1336.  
 Schafer, H.J. 1441.  
 Schal, C. 761.  
 Schamp, N. 189.  
 Scharf, S.M. 42.  
 Scharner, E. 278.  
 Schaub Simon, L. 1601.  
 Scheide, J. 1619.  
 Scheidl, F. 1505.  
 Schembri, P.J. 1322.  
 Schen, J.A. 1582.  
 Schiffman, S.S. 680, 1076, 1081.  
 Schiffmann, E. 1154, 1194.  
 Schimz, A. 745.  
 Schlenker, E.H. 886.  
 Schluenderberg, S.A. 1212.  
 Schmeling, D.J. 735, 1158.

- Schmidt, G.R. 1027.  
Schmidt, G.T. 1286.  
Schmidt, H., Jr. 1402.  
Schmidt, J. 139.  
Schmidt, J.O. 763, 764, 765.  
Schmitt, B.C. 27.  
Schmitt, D. 1168.  
Schmitt, D.J. 266.  
Schmitt, H. 1147.  
Schneider, J. 1353.  
Schnieden, H. 156.  
Schoffeniels, E. 150.  
Scholfield, C.N. 1120.  
Schonherr, J. 768.  
Schoonhoven, L.M. 791.  
Schreck, C.E. 1277.  
Schreier, P. 201, 1481, 1627.  
Schreir, P. 1487.  
Schreyen, L. 189.  
Schrodter, R. 1476.  
Schroeder, L. 901.  
Schuetzle, D. 988.  
Schuh, J.D. 1421.  
Schuil, H.A. 2.  
Schuler, G.A. 258.  
Schultze, W. 1524.  
Schutte, L. 253.  
Schwartz, C.C. 1419, 1522.  
Schwartz, G.G. 1365.  
Schweitzer, W.-F. 986.  
Sciafani, A. 924.  
Scott, J.W. 1505.  
Seabrook, W.D. 762, 763, 765, 783.  
Segal, G.M. 180.  
Segawa, M. 939.  
Seidel, W. 1441.  
Seigler, D.S. 287.  
Seitz, E.W. 982.  
Selby, C. 955.  
Seligmann, B.E. 1199.  
Selke, E. 1500.  
Selset, R. 1603, 1604.  
Sempere, A. 1363.  
Senf, W. 670.  
Senter, S.D. 1456.  
Seo, C.W. 1569.  
Seravin, L.N. 803.  
Seregina, E.A. 992.  
Seshu Reddy, K.V. 77.  
Sessa, D.J. 248, 252.  
Seto, H. 787.  
Seufert, H. 986.  
Sgarbieri, V.C. 1017.  
Sha'afi, R.I. 740.  
Shafa, F. 707.  
Shain, W. 1199.  
Shallenberger, R.S. 213.  
Shaner, K.M. 1026.  
Shani, A. 943.  
Sharma, S.P. 702.  
Sharpe, K. 1611.  
Sharpe, M.E. 947.  
Sharpless, N.S. 1129.  
Shaw, J.L. 23.  
Shaw, N. 1379, 1384.  
Sheil, J.M. 50.  
Shelton, A.M. 831.  
Shepherd, G.M. 31, 1049.  
Shepherd, R.F. 825.  
Sher, A. 1180.  
Sherman, A.H. 1090.  
Shiba, Y. 1140.  
Shibamoto, T. 1517.  
Shibuya, T. 11.  
Shields, J.M. 714.  
Shiga, I. 259.  
Shimada, A. 99.  
Shimazu, Y. 1477, 1482.  
Shimizu, J. 1477.  
Shimizu, T. 1141.  
Shinkai, S. 1486.  
Shinn, E.A. 918.  
Shinohara, T. 967, 1477, 1482.  
Shiomi, H. 939.  
Shiomi, K. 1503.  
Shipley, M.E. 1200.  
Shorey, H.H. 783, 1032.  
Showell, H.J. 1183, 1194.  
Shutz, R.A. 904.  
Siddiqui, M.J. 1318.  
Siegel, A. 1059.  
Siegel, D.G. 1027.  
Siegel, H.I. 877.  
Siegfried, B. 909.  
Silberstein, O. 993.  
Silk, P.J. 764.  
Siltzbach, L.E. 721.  
Siiver, W.L. 1054.  
Silverstein, R.M. 945.  
Silwar, R. 196.  
Simchowitz, L. 1190.  
Simescu, M. 1097.  
Simmons, S.E. 1013.  
Simon, P.W. 1458, 1459.  
Simpson, J. 1302.  
Simpson, R.F. 203, 1483, 1485.  
Singer, A.G. 867.  
Singer, G. 159.  
Singh, I. 1173.  
Singh, R.P. 1267.  
Singleton, V.L. 1553.  
Sinha, G.M. 710, 711.  
Sitaramaiah, S. 1295.  
Sjogblad, R.D. 64.  
Sjoden, P.-O. 155, 160, 1375.  
Skaren, U. 865.  
Skinner, W.A. 1277.  
Skjvedal, T. 991.  
Skuhravy, V. 837.  
Skurat, L.N. 885.  
Slansky, F., Jr. 1269.  
Slay, W.O. 1543.  
Slessor, K.N. 945, 1288.  
Slifer, E.H. 700.  
Slotnick, B.M. 910, 1393.  
Smilanich, J.M. 1250.  
Smith, A.B., III 889, 946.  
Smith, C.M. 98.  
Smith, C.W. 1189.  
Smith, D.V. 673, 674.  
Smith, G.C. 281, 1551, 1567, 1593.  
Smith, M.J.H. 1165, 1200.  
Smith, P.W. 917.  
Smith, R.M. 851.  
Smith, S.K. 777.  
Smithana, J.M. 165.  
Smits, P. 208.  
Smotherman, W.P. 901.  
Snow, J.W. 814.  
Snow, P.G. 265.  
Snowdon, C.T. 165.  
Snyderman, R. 53, 1164.  
Sochtig, I. 181, 192.  
Sofola, O.A. 1148.  
Sogawa, K. 1264.  
Sokolov, V.E. 885, 1342.  
Solis-Gaffar, M.C. 1102.  
Soll, D.R. 751.  
Sommer, B.A. 1016.  
Sommer, R. 1016.  
Soni, S.K. 113.  
Sonnet, P.E. 1228.  
Sonnett, P.E. 1439.  
Sood, V.K. 1538, 1539.  
Sorensen, H. 802.  
Sosulski, F. 950.  
Sower, L.L. 828.  
Spagnuolo, P.J. 1163.  
Sparks, A.N. 785, 786, 820, 1242, 1243.  
Spear, N.E. 1373, 1381.  
Speidel, B.D. 172.  
Spielman, A. 1035.  
Spilberg, I. 733, 1190.  
Spindler, A.A. 1020.  
Spiteri, N.J. 871.  
Spitznagel, J.K. 1152.  
Spoelstra, S.F. 989, 1536.  
Springer, M.S. 1206.  
Spudich, J.L. 59, 1211.  
Sreng, L. 697, 776.  
Srinivasan, A. 1033.  
Stabell, O.B. 1604.  
Stacewicz-Sapuntzakis, M. 1030.  
Staddon, B.W. 206.  
Stadelman, W.J. 1013.  
Stadler, E. 3, 1249.  
Staedler, E. 1259.  
Stafford, A.E. 250.  
Stallard, M.O. 147.  
Stan, G. 854.  
Stankevich, L.N. 672.  
Stapleton, J.M. 158, 1371.  
Starnes, E.C. 925.  
Starratt, A.N. 84.  
Stawicki, S. 1537.  
Steck, W. 1443.  
Steck, W.F. 818, 824, 1227.  
Steedman-Douglas, C.D. 1587, 1588.  
Steel, E. 868.  
Stein, E.A. 43.  
Stein, L. 1256.  
Steinbrecht, R.A. 1599.  
Steinbuch, E. 236.  
Steiner, J.E. 931.  
Steinert, P.A. 1373, 1381.  
Stephenson, J.W. 804.  
Stermitz, F.R. 792.  
Stern, F.L. 1332.  
Sternburg, J.G. 287, 773, 1231.  
Sternier, H. 274.  
Sternlicht, M. 121.  
Stevens, D.A. 1366.  
Steward, C. 120.  
Stewart, A. 1064.  
Stewart, W.B. 31.  
Stoddard, D.M. 882.  
Stoekienis, W. 1211.  
Stolerman, I.P. 1370.  
Stordeur, R.T. 988.  
Stravakis, G.N. 90.  
Stredwick, R.V. 1420.  
Strickland, G.R. 1290.  
Struble, D.L. 818, 1249, 1253.  
Struwe, H. 1497.  
Sturm, W. 227.  
Subramaniam, C.S. 1440.  
Subramoniam, T. 788.  
Suer, S. 870.  
Sugawara, F. 850, 1312.  
Sugawara, R. 839.  
Sugawara, S. 1499, 1612.  
Sugawara, T. 1581.  
Suguro, T. 178.  
Suhren, G. 244.  
Sukhova, G.K. 672.  
Sulskhanov, A.V. 132.  
Sullivan, F. 988.  
Sullivan, G.W. 721.  
Sun, F.F. 1160.  
Sun, R.C. 1505.  
Sundhadas, G. 726.  
Sundqvist, G. 1181.  
Suomala, H. 202.  
Suratt, P.M. 721.  
Suss, A. 985.  
Sutherland, R.J. 1411.  
Sutton, E.I. 1420.  
Suzuki, M. 187.  
Suzuki, T. 839, 1514.  
Sveen, K. 731, 1191.  
Svensson, G.E. 1357.  
Svensson, B.G. 74, 840.  
Swailes, G.E. 818.  
Swartzel, K.R. 1575.  
Swatell, R.H., Jr. 1072.  
Swigar, A.A. 945.  
Sylvester, J.T. 42.  
Symonds, G. 1151.  
Szantay, C. 1225.  
Szentesi, A. 69, 1229.  
Szot, S. 1154.  
Szulczyk, P. 1071.  
Tabacchi, R. 218.  
Taft, H.M. 110.  
Tahara, S. 956.  
Takagi, H. 939.  
Takagi, M. 264.  
Takagi, Y. 1490, 1491, 1496.  
Takahashi, K. 264.  
Takahashi, N. 1000, 1006, 1007.  
Takaishi, K. 99.  
Takamori, K. 730.  
Takayanagi, H. 667, 1445.  
Takei, Y. 1461.  
Takeuchi, A. 732.  
Takino, Y. 1511, 1512.  
Talley, F.B. 19.  
Tan, S.-H. 764.  
Tanaka, H. 1222.  
Tanaka, K. 1503.  
Tanaka, Y. 730.  
Tanchev, S. 1466.  
Tanizawa, H. 1511, 1512.  
Tanner, A.R. 1174.  
Tanski, D. 1173.  
Tarabeih, A.M. 1518.  
Targett, N.M. 863.  
Tarozi, G. 1412, 1413.  
Tashiro, H. 72, 810.  
Tateo, F. 1450.  
Tatum, J.D. 1593.



- Tauber, A.I. 1188.  
 Taukulis, H.K. 1378.  
 Tautan, L. 854.  
 Taylor, B.L. 742.  
 Taylor, O.R., Jr. 1233.  
 Taylor, R. 1571.  
 Taylor, T.R. 1103.  
 Teisinger, J. 1132.  
 Teisseire, P. 1494, 1495.  
 Tengo, J. 71, 760, 1309.  
 Teplov, V.A. 752.  
 Teranishi, R. 1463.  
 Terk, M.P. 1394.  
 Tesch, H. 1198.  
 Thal, J. 119.  
 Theunissen, J. 1280.  
 Theunissen, T.J.J.M. 1022.  
 thi Koizumi, C. 1564.  
 Thibout, E. 1226.  
 Thivolet, J. 1168.  
 Thomas, C.J. 255.  
 Thomas, G. 758.  
 Thomas, L. 1331.  
 Thomas, P.J. 1440.  
 Thomas, T.D. 990.  
 Thompson, M.P. 1416.  
 Thompson, R. 1392.  
 Thong, Y.H. 1169, 1187.  
 Thor, D.H. 166, 890.  
 Thorne, K.J.L. 1161.  
 Thorne, J. 1625.  
 Thornhill, R. 779.  
 Thorp, J.H. 789.  
 Threlkeld, S.F.H. 848.  
 Tichenor, L.H. 287.  
 Tikhonova, N.A. 712.  
 Tilden, P.E. 1281.  
 Tilgner, D.J. 1423.  
 Timmermann, J.R. 1293.  
 Tingle, F.C. 1297.  
 Tinsley, S.E. 169.  
 Tizabi, Y. 1118.  
 Tock, R.W. 983.  
 Todd, G. 1177.  
 Toews, M.L. 1206.  
 Toliver, M.E. 1231.  
 Tolle, A. 244.  
 Tomescu, N. 854.  
 Tompkins, L. 799.  
 Tono-Oka, T. 736, 1156.  
 Tonosaki, K. 11.  
 Topel, D.G. 1586, 1589.  
 Topoff, H. 138.  
 Torii, S. 205.  
 Joth, M. 1225.  
 Townsend, J.M. 1505.  
 Toyoshima, Y. 978.  
 Tozzi, S. 1335.  
 Travers, J.B. 673, 674.  
 Traystman, R.J. 42.  
 Tressl, R. 196, 199, 200.  
 Tripathi, R.S. 1042.  
 Tromp, A. 1597.  
 Trousdale, E. 1553.  
 Tsai, C.T. 923.  
 Tsang, K.Y. 1173.  
 Tubergen, D.G. 1084.  
 Tucker, A.R. 905.  
 Tucknott, O.G. 1609.  
 Tuley, W.B. 1027.  
 Tumlinson, J.H. 1257.  
 Turgut, H. 237.  
 Turillazzi, S. 860.  
 Turner, J.W., Jr. 1355.  
 Turner, S.R. 289.  
 Tuskes, P.M. 1244.  
 Tyler, J.L. 1122.  
 Tyrrell, D.A.J. 1100.  
 Tyson, B.L. 1544.  
 Uchida, M. 1438.  
 Ueda, K. 1106, 1107, 1109, 1111.  
 Ueda, T. 1219.  
 Uehara, H. 736.  
 Uehara, J. 839.  
 Ueki, S. 1126, 1131, 1431.  
 Ugolini, A. 860.  
 Ugstad, E. 1613.  
 Ulyanov, M.Yu. 1105.  
 Underhill, E.W. 818, 824, 1227, 1443.  
 Underwood, R. 879.  
 Uneyama, K. 205.  
 Unterhalt, B. 1506.  
 Urago, T. 811, 812.  
 Uralets, V.P. 1473.  
 Urbanski, G.E. 1562.  
 Urthaler, F. 1072.  
 Vale, G.A. 114.  
 Valentine, D., Jr. 1505.  
 Valone, F.H. 51, 1184.  
 Van 208.  
 van Alphen, J.J.M. 1235.  
 van Brouwershaven, J. 208.  
 Van Buren, J.P. 285.  
 van Buskirk, R.L. 673.  
 van den Heever, J.A. 1112.  
 van den Ouweland, G.A.M. 253.  
 van der Molen, J.N. 797.  
 Van Der Ouderaa, F. 208.  
 Van Der Pers, J.C.N. 9.  
 Van Der Pers, J.N.C. 1104.  
 van der Schaal, A.W.J. 797.  
 van der Vuurst de Vries, R.G. 236.  
 Van Der Wel, H. 208.  
 van der Wel, H. 1415.  
 Van Der Wel, H. 1507.  
 van Dorsser, W. 127.  
 van Drongelen, W. 14, 1062.  
 Van Duyne, F.O. 1025.  
 Van Dyck, J. 1614.  
 Van Dyke, T.E. 1099.  
 Van Engen, D. 147.  
 van Epps, D.E. 718.  
 van Essen, F. 1103.  
 Van Herp, F. 26.  
 van Straten, S. 204.  
 Vander Meer, R.K. 117.  
 Vanderhill, B. 729.  
 Vanhaelen, M. 1320.  
 Vanhaelen-Fastre, R. 1320.  
 Varma, R.V. 861.  
 Varnum, B. 751.  
 Vasilieva, N.Yu. 885.  
 Vasselli, J.R. 924.  
 Vehvilainen, H. 964.  
 Velghe, K. 1529.  
 Velisek, J. 960, 1464.  
 Venard, R. 769.  
 Venge, P. 1196.  
 Venkatasubramanian, K. 1154.  
 Verhoef, J. 735.  
 Verigin, V. 128.  
 Vernoff, S. 1311.  
 Vernon, J.D.R. 109.  
 Verstraete, W. 1529.  
 Verzele, M. 1614.  
 Vetulani, J. 1128.  
 Vick, K.W. 120, 1228.  
 Villota, R. 1561.  
 Vincent, J. 1195.  
 Viriot, M.L. 1502.  
 Visser, J.H. 7, 8, 204.  
 Vita, R.A. 92.  
 Vitzthum, O.G. 262.  
 Voerman, S. 944, 1253, 1292.  
 Vogt, R.C. 864.  
 Vold, E. 1613.  
 Volden, R. 1484.  
 Volpe, N.O. 1055.  
 Voltzit, O.V. 794.  
 von Boletzky, S. 862.  
 von Elbe, J.H. 1019.  
 Von Gunten, R.L. 1615.  
 Vorhees, C.V. 1620.  
 Voris, H.H. 1025.  
 Vosgen, B. 1628.  
 Vostrowsky, O. 1442, 1444.  
 Voyadjoglou, A. 80.  
 Vrkoc, J. 837.  
 Wada, M. 1141.  
 Wagner, J.R. 996.  
 Wahba, A. 692.  
 Wakabayashi, S. 1493.  
 Waldbauer, G.P. 773, 1231.  
 Walker, H.W. 1586, 1589.  
 Walker, N. 1590.  
 Walker, R.I. 50.  
 Wallace, S. 21.  
 Wallbank, B.E. 96.  
 Walters, S. 821, 1304.  
 Walters, T.R. 1092.  
 Wang, C.-I. 695.  
 Wang, C.Y. 1559.  
 Ward, D.R. 1605.  
 Ward, P.A. 44, 1152, 1178, 1183.  
 Ward, S. 66.  
 Warrick, H.M. 742.  
 Washutt, J. 971.  
 Wasowicz, E. 1537.  
 Wassermann, L. 1578.  
 Watada, A.E. 1018, 1465.  
 Watanabe, M. 967, 1482.  
 Watanabe, S. 1126, 1131, 1431.  
 Wax, R. 1442.  
 Wayner, E.A. 159.  
 Wayner, M.J. 923, 1377, 1390.  
 Webb, A.D. 1479.  
 Webster, D.McD. 1384.  
 Webster, D.McD. 1379.  
 Webster, G.F. 969.  
 Webster, R.P. 1289.  
 Weeks, B.A. 720.  
 Weerasuriya, A. 33.  
 Weete, J.D. 241.  
 Wegner, T.N. 1421.  
 Wei, L.S. 1562.  
 Weiblen, B.J. 1162.  
 Weigel, V. 1090.  
 Weik, T. 768.  
 Welch, N.M. 917.  
 Weller, P.F. 1160.  
 Welles, R.V. 1146.  
 Wellington, J.L. 888, 889, 1119.  
 Wellington, W.G. 796.  
 Wellman, P.J. 167.  
 Wenzel, B.M. 1058.  
 Werkhoff, P. 197, 262.  
 Werner, R.G. 932.  
 West, L.G. 1040.  
 Westlering, D.B. 279.  
 Weston, W.L. 1084.  
 Wheatley, G.A. 96.  
 Wheeler, L. 1555.  
 White, J.G. 1098.  
 Whiting, D.A. 1513.  
 Whitney, G. 1353.  
 Whitten, W.K. 1361.  
 Wierenga, B. 1573.  
 Wiese, R.E., Jr. 166.  
 Wiesner, C.J. 764.  
 Wiggins, K. 1548.  
 Wilkinson, B.J. 735.  
 Wilkinson, J.D. 1286.  
 Wilkinson, P.C. 714.  
 Wilkinson, S. 737.  
 Williams, A.A. 1609.  
 Williams, F.L. 1593.  
 Williams, R.C., Jr. 718.  
 Williams, T.H. 1505.  
 Williamson, A.M. 1391.  
 Willis, B.J. 207.  
 Willoughby, D.A. 1166.  
 Wilson, J.R. 1330.  
 Wilson, K.C.P. 704.  
 Wilson, M.C. 1361.  
 Wilson, M.I. 1350.  
 Wilson, R.F. 98.  
 Wilson, S.R. 1361.  
 Winder, M. 841.  
 Winkler, A. 1578.  
 Winstanley, C. 12.  
 Wishart, T.B. 164.  
 Wissler, J.H. 724, 1192, 1202.  
 Wiszniowska, G. 1128.  
 Witherly, S.A. 22.  
 Wittek, J. 987.  
 Witz, J.A. 819.  
 Wohlfarth Bottermann, K.E. 755.  
 Wolf, J.O. 884.  
 Wollerman, E.H. 834, 835.  
 Wolm, G. 1476.  
 Wolski, T.R. 881.  
 Wong, D.T.W. 945.  
 Wong, R. 926.  
 Wood, D.L. 974, 1246, 1281, 1307.  
 Wood, L.M. 1148.  
 Woodams, E.E. 984.  
 Woods, E.G. 1021.  
 Woolford, G. 246.  
 Wozniacka, J. 1329.  
 Wren, A. 156.  
 Wren, A.F. 1123.  
 Wright, J.W. 1399.  
 Wu, M.-F. 1371.  
 Wuensch, K.L. 887.  
 Wyman, J.A. 808, 830, 831.  
 Wysocki, C.J. 1119, 1353.  
 Wzorek, W. 1554.

- Yaginuma, K. 70.  
 Yajima, I. 1454.  
 Yamaguchi, H. 99.  
 Yamaguchi, K. 1517.  
 Yamaguchi, M. 1331.  
 Yamamoto, A. 1558.  
 Yamamoto, B.K. 906.  
 Yamamoto, M. 1106, 1107,  
 1109, 1111.  
 Yamamoto, S. 716.  
 Yamamoto, T. 1067.  
 Yamanaka, H. 1503.  
 Yamanishi, T. 1461, 1470.  
 Yamasaki, F. 38.  
 Yamashita, K. 850, 1312.  
 Yamashita, T. 730.  
 Yamazaki, K. 1331.  
 Yamazawa, M. 259.  
 Yamura, T. 716.  
 Yanai, T. 1454.  
 Yanase, M. 1470.  
 Yanez, E. 1577.  
 Yang, H.-H. 729.  
 Yarger, R.G. 946.  
 Yasumoto, K. 1558.  
 Yates, W.D.G. 1624.  
 Yathom, S. 1292.  
 Yin, T.H. 923.  
 Yokotsuka, K. 1486.  
 Yokotsuka, T. 1468.  
 Yoshida, M. 678.  
 Yoshihara, T. 1264.  
 Yoshii, K. 1063.  
 Yoshimura, M. 978.  
 Yost, M.T. 100.  
 Younathan, M.T. 1568.  
 Young, J.R. 105.  
 Yugari, Y. 928.  
 Zacharko, R.M. 164.  
 Zhorik, D.M. 897.  
 Zalewski, A.A. 36.  
 Zaragosa, E.M. 994.  
 Zaya, J. 1553.  
 Zehner, M.D. 269.  
 Zhadan, G.G. 1055.  
 Ziegler, H.W. 952.  
 Zimmerman, M. 774.  
 Zinkevich, E.P. 180.  
 Zornetzer, S.F. 1116.  
 Zoumas, B.L. 234.  
 Zukin, R.S. 747.  
 Zumreoglu, A. 75.



---

**Subject Index**


---

**Abdominal gland secretions,**

Leptoglossus/Euthochtha, volatiles 83.

**Acacia,**

amino acids, Anacridium melanorhodon/Locusta migratoria, feeding 1261.

**Acanthaster planci,**

defence mechanisms, saponins 916.

**Acanthoscelides obtectus,**

oviposition 69.

**Accessory olfactory bulb,**

bats 1144.

**ACDAS,**

chemotaxis, quantification 289.

**Acephate,**

asparagus, off flavour 1560.

**Acetates,**

insects, pheromones, evaporation, quantification 809.

**Acetic acid,**

rats, food intake 167.

tobacco, quantification 1612.

**Acetoin,**

wine, flavour compounds 1482.

**Acetylcholine,**

cats, carotid body/aortic chemoreceptors 1145.

**Acetylcholinesterase,**

rats, olfactory bulbs 1133.

**Acidity,**

eggs salads, taste panel evaluation 1013.

Physarum polycephalum, chemotaxis 752.

tomatoes 973.

**Acilius,**

defence secretions, chromatography (high-pressure liquid) 1034.

**Acleris gloverana,**

traps baits, pheromones 825.

**Acomys cahirinus,**

chemical communication 872.

**Acrolepia alliella,**

reproductive behaviour, pheromones, (Z)-11-hexadecenyl acetate/(Z)-11-hexadecenol 70.

**Acrolepiopsis assectella,**

oviposition, pheromones-effects on 1226.

**Acute lymphoblastic leukaemia,**

monocytes-man, chemotaxis 1084.

**Adaptations,**

man, saltiness, taste thresholds, review 1083.

**Adenylate cyclase,**

rats, olfactory tubercle 708.

**Adherence,**

leucocytes (polymorphonuclear)-man, chemotaxis 734.

**Adoxophyes,**

pheromones, 11-methyl-cis-9,12-tridecadienyl acetate 1438.

pheromones, 10-methyldodecyl acetate-synthesis 178.

**Adoxophyes orana,**

antennal chemoreceptors, pheromones receptors, electroantennogram 2.

traps baits, pheromones 109.

**Aedes aegypti,**

olfactometers, host searching behaviour 1035.

repellents, lactic acid derivatives 1277.

**Aedes caspius,**

oviposition 759.

**Agaricus bisporus,**

aroma compounds 1464.

**Age,**

man, taste thresholds, amino acids 1076.

man, taste thresholds, saltiness 690.

Phormia regina, labellar chemoreceptors, electrical properties 701.

white wine, aroma compounds 203.

**Ageing,**

coffee, quantification 293.

macrophages-guinea-pigs, chemotaxis 720.

wine, organic acids-esterification 1477.

**Aggregation,**

Ips typographus, pheromones 854.

Leperisinus californicus, pheromones 1311.

Onychiurus armatus, pheromones 1315.

**Aggregation behaviour,**

Amblyomma variegatum, pheromones 1299.

Cryptolestes ferrugineus, pheromones 128.

Dendroctonus frontalis, pheromones 1306.

Dendroctonus jeffreyi, pheromones, 1-heptanol/2-heptanol 129.

Gnathotrichus retusus/Gnathotrichus sulcatus, pheromones 133.

Lygaeus kalmii/Oncopeltus fasciatus, pheromones 1314.

Neoaplectana carpocapsae, host location 139.

Orchesella cincta, pheromones 1316.

Trypodendron lineatum, pheromones, 4,6,6-lineatin 945.

mice, olfactory tubercle/septum/substantia nigra, noradrenaline/dopamine 1118.

mice, pheromones 1351.

pigs, bulbectomy-effects on 1337.

rats, olfactory bulb, dopamine 1129.

rats, olfactory tubercle, atropine 940.

**Agrobacterium,**

chemotaxis 741.

**Agrotis venerabilis attractants,**

(Z)-5-decenyl acetate/(Z)-7-dodecenyl acetate 1227.

**Akodon olivaceus,**

food selection 1398.

- L-Alanine**,  
*Ictalurus punctatus*, taste cells 34.
- Alarm behaviour**,  
*Elasmucha grisea*, pheromones 131.
- Alcoholic beverages**,  
 aroma compounds, yeasts-effects on 202.
- Alcohols**,  
 structure-activity relationships, frog, olfactory epithelium,  
 electro-olfactograms 670.
- Aldehyde dehydrogenase**,  
 food, off flavours 1000.  
 mutton, off flavours 1006.  
 soyabeans, off flavours 1006, 1007.
- Aldoximes**,  
 sweetness/bitterness, structure-activity relationships 1515.
- L-5-Alk(en)ylthiomethylhydantoin-(±)-S-oxide**,  
*Allium*, flavour compounds 956.
- Alkaline phosphatase**,  
 mice/rats, taste buds, regeneration 36.
- Alkaloids**,  
*Hymenocallis littoralis*, *Schistocerca gregaria*, feeding  
 deterrents 1267.
- Alkalinease**,  
 onions, tissue culture, flavour compounds 955.
- Allium**,  
 flavour compounds, L-5-alk(en)ylthiomethylhydantoin-(±)-S-  
 oxide 956.
- Allomones**,  
*Womersia strandtmanni*, predatory behaviour 106.
- Allspice**,  
*Pimenta dioica*, phenolic compounds 1628.
- Almitrine**,  
 dogs, aortic chemoreceptors/carotid chemoreceptors 1147.
- Alpinobombus**,  
 marking behaviour, pheromones 840.
- Alteration behaviour**,  
*Porcellio scaber*, antennectomy-effects on 141.
- Amblyomma variegatum**,  
 aggregation behaviour, pheromones 1299.
- Ambystoma tigrinum**,  
 olfactory epithelium/olfactory bulbs, olfactory receptors,  
 temporal firing patterns 669.
- Ambystoma tigrinum**,  
 odour aversion learning, avoidance behaviour, amyl acetate/  
 camphor 1366.
- Amides**,  
*Tribolium confusum*, repellents 123.
- Amino**,  
 saccharin/sodium cyclamate, temperature effects 971.
- Amino acid sequence**,  
 thaumatin I, sweeteners 208.
- Amino acids**,  
*Acacia*, *Anacridium melanorhodon*/*Locusta migratoria*,  
 feeding 1261.  
*Anguilla japonica*, palate chemoreceptors 1063.  
 bitter peptides, structure-activity relationship 1516.  
*Dasyatis sabina*, olfactory organs, electrophysiological  
 recording 1054.  
 food, flavour compounds 1476.  
 D-fructose/D-arabino-hexosulose-reaction, odours profiles  
 1449.  
 taste thresholds, man, age-effects on 1076.
- Amino acids receptors**,  
*Ictalurus nebulosus*, barbels 1064.
- Ammi visnaga**,  
 essential oils, *Sclerotinia sclerotiorum*-effects on 1518.
- Ammonia**,  
 shrimps, off flavours/off odours, quantification 1605.
- AMP (cyclic)**,  
*Dictyostelium discoideum*, chemotaxis 1218.  
 guinea pigs, olfactory cortex, serotonin/GABA-effects on 30.  
 leucocytes (neutrophilic)-man, chemotactic factors-effects on  
 1190.  
 leucocytes (neutrophilic)-man, chemotaxis 49.  
 leucocytes (neutrophilic)-rabbits, chemotaxis 1202.  
*Physarum polycephalum*, chemotaxis 753.
- AMP (cyclic) receptors**,  
*Dictyostelium discoideum*, chemotaxis 61.
- Amyelois transitella**,  
 pheromones, (Z,Z)-11,13-hexadecadienal 1228.  
 pheromones, (Z,Z)-11,13-hexadecadienal-synthesis 1439.
- Amygdala**,  
 cats, lateral olfactory tract/substantia innominata/sylvian  
 gyri stimulation-effects on 1059.  
 rats, taste aversion learning, ESB 909.
- Amygdala lesions**,  
 rats, avoidance learning 904.
- Amyl acetate**,  
*Ambystoma tigrinum*, odour aversion learning, avoidance  
 behaviour 1366.
- Anacridium melanorhodon**,  
 feeding, *Acacia* amino acids-effects on 1261.
- Anaesthesia**,  
 rats, taste aversion learning 1384.
- Anaesthetics**,  
 guinea-pigs, olfactory cortex 1120.  
*Salmo gairdneri*, oxygen receptors 1142.
- Anas platyrhynchos**,  
 chemical communication, uropygial gland secretions 150.
- Anastrapha suspensa**,  
 oviposition, site selection 1229.
- Andrena**,  
 reproductive behaviour, pheromones 760.
- Andrena carantonica**,  
 reproductive behaviour, pheromones 71.
- Andrena fuscipes**,  
 reproductive behaviour, pheromones 71.
- Andrena haemorrhoa**,  
*Cyripedium calceolus*-pollination 1300.  
 reproductive behaviour, pheromones 71.
- Anethum graveolens**,  
 essential oils, *Sclerotinia sclerotiorum*-effects on 1518.
- Angelica glauca**,  
 essential oils 216.
- Anguilla japonica**,  
 palate chemoreceptors, amino acids-effects on 1063.
- Anguilliformes**,  
 olfactory epithelium 1106.
- Animal housing**,  
 odour control 231.  
 odour pollution, odour control 230.
- Anisyl acetone**,  
 traps baits, *Insecta* 1286.
- Anntenule chemoreceptors**,  
*Homarus americanus* 1047.
- Anosmia**,  
 gerbils, novelty habituation 938.  
*Notophthalmus viridescens*, homing behaviour 1425.  
 pigeons, homing behaviour 1428, 1429.  
 rats, maternal behaviour 875.  
 rats, olfactory bulbs-development 707.  
 rats, sex hormones 1335.



- Antennal chemoreceptors,**  
*Adoxophyes orana*, pheromones receptors, electroantennogram 2.  
*Bombyx mori*, cryo-ultramicrotomy 1599.  
*Formica polyctena*, brood care 698.  
*Homadaula isosocentra* 700.  
*Ips pini*, electroantennogram, pheromones 6.  
*Leptinotarsa decemlineata*, electroantennogram, host searching behaviour 8.  
*Leptinotarsa decemlineata*, olfactory perception 7.  
*Malacosoma americanum*, plants volatiles-effects on 1046.  
*Periplaneta americana*, pheromones-effects on, electroantennograms 667.  
*Trichoplusia ni*, esterases, pheromones-hydrolysis 1103.  
*Yponomeuta* 1104.  
*Yponomeuta*, electroantennogram 9.
- Antennectomy,**  
*Porcellio scaber*, alternation behaviour 141.
- Antennule lesions,**  
*Homarus americanus*, feeding behaviour 806.
- Anterhynchium abdominale,**  
 defence secretions 1301.
- Anthonomus grandis,**  
 pheromones, (+)-cis-2-isopropenyl-1-methylcyclobutaneethanol/(Z)-3,3-dimethyl- $\Delta^1\beta$ -cyclohexaneethanol/ $\beta$ -caryophyllene 1230.  
 traps baits, grandlure 110.
- Anti-predator behaviour,**  
*Dardanus arrosor* 862.  
*Phyllodoce mucosa* 1325.  
*Polistes gallicus*/*Polistes foederatus*/*Polistes nimpha* 860.  
*Sepsidae*, swarming behaviour 145.
- Antifeedants,**  
 insects, guazatine triacetate 93.
- Antiinflammatory drugs,**  
 leucocytes (neutrophilic)-man, chemotaxis 48.
- Antimicrobial activity,**  
 essential oils/fragrances, soaps 982.
- Aonidiella aurantii,**  
 attractants, (3Z,6R)-3-methyl-6-isopropenyl-3,9-decadien-1-yl 810.
- Aonidiella citrina,**  
 pheromones, (E)-3,9-dimethyl-6-isopropyl-5,8-decadien-1-yl a 72.  
 pheromones, (E)-3,9-dimethyl-6-isopropyl-5,8-decadien-1-yl a, synthesis 942.
- Aortic body,**  
 cats, respiration 1070.  
 dogs, heart 1148.
- Aortic chemoreceptors,**  
 cats, acetylcholine 1145.  
 dogs, almitrine-effects on 1147.
- Aortic nerves,**  
 cats, horseradish peroxidase transport, peripheral chemoreceptors 1146.
- Apanteles glomeratus,**  
 host searching behaviour 125.  
 reproductive behaviour, pheromones 73.
- Aphaenogaster subterranea,**  
 foraging behaviour, recruitment 794.
- Aphis fabae,**  
 host selection, plant extracts-effects on 793.
- Apis,**  
 foraging behaviour, herbicides-effects on 796.
- Apis cerana,**  
 social behaviour, queens-pheromones 842.
- Apis mellifera,**  
 attractants, Beeline 126.  
 foraging behaviour, pheromones 795.  
 queens, pheromones 1302.  
 swarming behaviour, pheromones-effects on 841.
- Apium graveolens,**  
 aroma compounds 1488.
- Aplysia brasiliana,**  
 defence mechanisms, cis-dihydrorhodophytin 147.
- Apodemus flavicollis,**  
 chemical communication 885.
- Apomorphine,**  
 rats, olfactory bulb 1128.
- Apple wine,**  
 organoleptic evaluation, bitterness 285.
- Apples,**  
 genetics 992.  
 volatiles, quantification, chromatography (gas) 190.
- D-Arabino-hexosulose,**  
 amino acids-reaction, odours profiles 1449.
- Arachidonic acid,**  
 leucocytes (polymorphonuclear)-man, chemotaxis 51.  
 leucocytes (polymorphonuclear)-man, eosinophil chemotactic factor-release, phospholipase A2-role 1198.
- Arachidonic acid derivatives,**  
 leucocytes (neutrophilic)-man, chemotaxis 1186.
- Archips podana,**  
 traps baits, pheromones 109.
- Arepas,**  
 taste panel evaluation, fortification-effects on 273.
- Argas cooleyi,**  
 temperature preferences, pheromones 1303.
- Aroma compounds,**  
 see **Flavour compounds and Volatiles**  
*Agaricus bisporus*/*Boletus edulis*, mushrooms 1464.  
 alcoholic beverages, yeasts-effects on 202.  
*Apium graveolens* 1488.  
 beer, malt-effects on 200.  
 bread, temperature effects 1542.  
 budu-fish, fermentation-effects on 962.  
 cheese, S-methylthioacetate, *Brevibacterium linens* 949.  
 cheese, sulphur compounds 951.  
*Citrus iyo*, essential oils 1461.  
 coffee, off flavours 196.  
 coffee, storage changes 197.  
 flavonoids 1492.  
 food, legislation, Hungary 1621.

**Aroma compounds, (continued)**

- food, microorganisms-effects on 1537.  
fruit, wine 1554.  
heteroatomic components 1451.  
hops, storage effects 199.  
krill, off odour 1470.  
lavender/lavandin/spike lavender, essential oils,  
  quantification 1038.  
meat 1475.  
milk/milk products, review 1453.  
orange juice, review 1467.  
organoleptic evaluation, olfactometers 1616.  
plums, collection, Porapak Q 1609.  
port wine 1483.  
review 182.  
salmon, smoking-effects on 1471.  
soya sauce, organoleptic evaluation 957, 958, 959.  
strawberry, organoleptic evaluation 1582.  
tobacco, 5,6-dihydro-5-hydroxy-3,6-epoxy- $\beta$ -ionol 1491.  
tobacco, 2,3-dihydro-5-hydroxy-6-methyl-4H-pyranone  
  1489.  
tobacco smoke condensates 1499.  
whiskey/brandy/rum/wine/beer, damascenone 1480.  
white wine, age-effects on 203.  
wine 1485.  
wine, malolactic fermentation-effects on 965.  
wine, 2-phenylethyl alcohol/ $\gamma$ -butyrolactone 967.  
wine, quantification 1607.

**Arterial chemoreceptors lesions,**

- rats, respiration 713.

**Arylsulphatase,**

- Periplaneta americana*, pheromones-production 780.

**Ascorbic acid,**

- leucocytes (neutrophilic), chemotaxis 1176.  
leucocytes (polymorphonuclear)-man, chemotaxis,  
  microtubules 729.

**Asparagus,**

- off flavour, acephate-effects on 1560.

**Aspartame,**

- soft drinks, taste panel evaluation 284.

**Aspartame,**

- sweeteners, toxicity 1620.

**Aspartame analogues,**

- sweeteners, synthesis 1504.

**Aspartate,**

- rats, olfactory cortex, transduction mechanisms 671.

**Aspergillus foetidus,**

- odour control, wastewater treatment 984.

**Assays,**

- macrophages-mice, chemotaxis 1601.  
monocytes-man, chemotaxis 1600.

**Astacus leptodactylus,**

- eye stalk chemoreception 26.

**Atheriniformes,**

- olfactory epithelium 1107.

**Atlanto-astacus pallipes pallipes,**

- feeding behaviour, chromium-effects on 1271.

**ATP,**

- leucocytes (granulocytic)-man, chemotaxis, storage effects  
  1162.

**Atranorin,**

- Spodoptera ornithogalli, feeding behaviour 1269.

**Atropine,**

- rats, aggressive behaviour, olfactory tubercle 940.

**Atta,**

- traps baits, attractants 111.

**Attractants,**

- Agrotis venerabilis*/*Euxoa albipennis*, (Z)-5-decenyl acetate/  
  (Z)-7-dodecenyl acetate 1227.  
*Aonidiella aurantii*, (3Z,6R)-3-methyl-6-isopropenyl-3,9-  
  decadien-1-yl 810.  
*Apis mellifera*, Beeline 126.  
*Atta*, traps baits 111.  
*Ceratitis capitata*, methyl (E)-6-nonenolate 811.  
*Chrysopa carnea*, caryophyllene 1304.  
*Cochliomyia hominivorax*, swormlure 814.  
*Costelytra zealandica*, phenols 815.  
*Cucullia umbratica*/*Sesamia cretica*, pheromones 1294.  
*Culex tarsalis*/*Culex pipiens quinquefasciatus*, oviposition  
  1236.  
*Delia antiqua*, sulphur chemicals 113.  
*Delia brassicae*, Cruciferae-volatiles 96.  
*Dendroctonus pseudotsugae*, 3-methylcyclohex-2-en-1-one  
  1283.  
*Earias insulana*, pheromones, (E,E)-10,12-hexadecadienal  
  816.  
*Eucera longicornis*, Ophrys 849.  
*Eurois occulta*/*Euxoa messoria*/Scotogramma trifolii, (Z)-11-  
  hexadecenyl acetate 1443.  
*Euxoa tritricula*, crops baits, Z-9-dodecenyl acetate/n-  
  dodecyl acetate 818.  
grasshoppers, phagostimulants 112.  
*Haematobia irritans*, cattle, hormones-effects on 134.  
*Hypera postica*, *Medicago sativa*, volatiles 1262.  
insects, host preferences 94.  
Lepidoptera 824.  
Lepidoptera, maize, volatiles 1310.  
*Lymantria dispar dispar*lure 1289.  
*Oidaematophorus monodactylus*, reproductive behaviour,  
  (Z)-9-dodecenal 1224.  
*Oryctes rhinoceros*, ( $\pm$ )-des-N-morphinan 117.  
*Panagrellus redivivus*/*Rhabditis oxycerca* 757.  
Sesiidae, 3,13-octadecadien-1-ol acetates, synthesis 944.  
*Tyrophagus putrescentiae*, Basidiomycetes, volatiles, octa-  
  1,5-dien-3-ol 1320.  
*Zeiraphera diniana*, (E)-9-dodecenyl acetate/(E)-11-  
  tetradecenyl acetate 837.
- Aversion learning,**  
see **Taste aversion learning and Odour aversion learning**  
chickens 1367, 1368.  
*Manduca sexta* 100.  
rats, barbiturates-effects on 1390.  
rats/*Sigmodon hispidus*, olfactory stimuli 1380.  
*Saimiri sciureus*, orientation disruption-effects on 915.  
**Avoidance behaviour,**  
*Ambystoma tigrinum*, odour aversion learning, amyl acetate/  
  camphor 1366.  
chickens, blood odours-effects on 935, 936.  
*Helix lucorum*, metacerebral cells 805.  
rats, learning 176.

**Avoidance learning,**

*Drosophila melanogaster*, genetics 847.  
rats, bulbectomy, psychoactive drugs-effects on 156.  
rats, septum/amygdala/nucleus accumbens/olfactory  
tubercle lesions-effects on 904.

**Bacillus subtilis,**

chemotaxis, protonmotive force 1205.

**Bacteria,**

chemotaxis, regulation, review 1204.  
chickens, off odours 255, 260.  
haemocytes-*Crassostrea virginica*, chemotaxis 46.  
infection, man, leucocytes (neutrophilic), chemotaxis 1085.  
leucocytes (polymorphonuclear)-man, chemotaxis 1197.  
man, mouth odours, chromatography (gas) 1102.  
milk, off flavours 244.  
miso, flavour compounds 188.

**Bacteroides asaccharolyticus,**

leucocytes (neutrophilic)-guinea-pigs, chemotaxis 1181.

**Bacteroides fragilis,**

leucocytes (polymorphonuclear), chemotaxis 1191.  
lipopolysaccharides, antibodies, leucocytes  
(polymorphonuclear)-rabbits, chemotaxis 731.

**Bacteroides melaninogenicus,**

leucocytes (neutrophilic)-guinea-pigs, chemotaxis 1181.

**Barbels,**

*Ictalurus nebulosus*, amino acids receptors 1064.

**Barbiturates,**

rats, aversion learning 1390.

**Baroreceptors,**

dogs, chemoreceptors reflexes 1072.

**Basal fore brain,**

cats, swallowing reflex 33.

**Basidiomycetes,**

volatiles, octa-1,5-dien-3-ol, *Tyrophagus putrescentiae*,  
attractants 1320.

**Bats,**

accessory olfactory bulb 1144.

**Bean,**

proteins hydrolysates, bitterness 1563.  
*Psophocarpus tetragonolobus*, processing-effects on 994.  
storage effects, carbon dioxide-effects on 995.  
taste panel evaluation, nutrient enrichment-effects on 1017.

**Beans flour,**

bread 1579.

**Bears,**

marking behaviour 880.

**Beaver,**

marking behaviour 891.  
*Castor canadensis*, marking behaviour 1356, 1357.

**Beef,**

freezing-effects on 1551.  
off flavours, warmed-over-flavour, phospholipids/  
triglycerides-role 1011.  
organoleptic evaluation 1593.  
organoleptic evaluation, chilling-effects on 280.  
organoleptic evaluation, fatty acids, diets-effects on 279.  
organoleptic evaluation, grinding methods-effects on 997.  
organoleptic evaluation, microwave cooking-effects on 1025.  
roasted, flavour compounds 194.  
storage effects, rancidity 1568.  
taste panel evaluation 1024.  
taste panel evaluation, electrical stimulation-effects on 281.  
taste panel evaluation, storage effects 1586.

**Beef loaves,**

organoleptic evaluation, soya protein/chickpea meal-effects  
on 1026.

**Beef patties,**

off flavour, cooking-effects on 1567.  
organoleptic evaluation, soya protein-effects on 282.  
peanuts flour-effects on 1550.

**Beeline,**

*Apis mellifera*, attractants 126.

**Beer,**

aroma compounds, damascenone 1480.  
aroma compounds, malt-effects on 200.  
bitter acids, chromatography (high-performance liquid) 1614.  
flavour compounds, characterisation 966.  
flavour compounds, clarification-effects on 964.  
flavour compounds, yeasts-effects on 1484.  
hops, aroma compounds, storage effects 199.  
off flavours, isohumulones-degradation 263.  
off odour, *Saccharomyces cerevisiae* killer factor-effects on  
1571.  
taste panel evaluation 1594, 1595.  
taste panel evaluation, stale flavours, graphic linear scaling  
266.  
volatiles, sulphur compounds 1478.  
volatiles, sulphur compounds, quantification 1608.

**Bees,**

see *Apis mellifera*

queen, pheromones-synthesis 1440.

**Benoxaprofen,**

leucocytes (polymorphonuclear)-rats, chemotaxis 728.

**Benzyl alcohol,**

lemon, essential oils, quantification 1610.

**Beta adrenergic blocking agents,**

leucocytes (neutrophilic)-man, chemotaxis 725.

**Betta splendens,**

reproductive behaviour 1326.

**Bicuculline,**

gecko, olfactory bulbs 11.

**Bile,**

rats, maternal behaviour, pheromones 1345.

**Bioassays,**

rats, olfactory preferences 1030.

**Biosynthesis,**

monocytes-man, chemotactic factors 1156.

**Birds,**

food preferences, development 934.



- Bitter acids**,  
beer, chromatography (high-performance liquid) 1614.
- Bitter peptides**,  
amino acids, structure-activity relationship 1516.
- Bitter principle**,  
Gentianae, chromatography (liquid) 1512.  
Naematoloma fasciculare mushrooms 1503.  
Swertia, chromatography (liquid) 1511.
- Bitterness**,  
aidoximes, structure-activity relationships 1515.  
apple wine/cider, organoleptic evaluation 285.  
Chrysolina herbacea, defence secretions, cardiac glycosides 127.  
Citrus natsudaoidai, naringinase-effects on, thermal stability 972.  
corn chips, off flavours, germination-effects on 245.  
hops, colupulone 1502.  
hops, ripening-effects on 210.  
lipids/carbohydrates, structure-activity relationships, hydrophobicity 975.  
man, taste perception, sweetness-mixtures 15.  
man, taste thresholds, saliva content-effects on 683.  
monoglycerides, oats 212.  
oranges, flavour compounds, flavanones 211.  
potato/bean/soybean, proteins hydrolysates 1563.  
potatoes, glycoalkaloids, quantification 1037.  
potatoes proteins 247.  
protein hydrolysates, debittering 209.  
rats, food preferences, weaning experience-effects on 165.  
soybeans, flavour compounds, 9,12,13-trihydroxyoctadeca-10-enoic acid/9,10,13-trihydroxyoctadeca-11-enoic acid 191.
- Blastoceros bezoaricus**,  
scent gland 1437.
- Blattella germanica**,  
pheromones, 3,11-dimethyl-2-nonacosanone, synthesis 1441.  
reproductive behaviour, orientation 761.  
tergal gland 697.
- Blood odours**,  
chickens, avoidance behaviour 935, 936.
- Blood pressure**,  
rats, bulbectomy-effects on 1126.
- Blueberries**,  
organoleptic evaluation, triflorine-effects on 1583.
- Body odours**,  
deodorants, deosafe fragrances 227.
- Boletus edulis**,  
aroma compounds 1464.
- Bombus**,  
labial gland secretions, pheromones 74.
- Bombykal**,  
Manduca sexta, pheromones 84.
- Bombyx mori**,  
antennal chemoreceptors, cryo-ultramicrotomy 1599.
- Bonellia viridis**,  
defence mechanisms, palatability 1322.
- Book**,  
food, flavour compounds 300.  
olfactometers, man 1093.  
preferences behaviour 1043.  
sodium appetite, thirst 1626.
- Bovine diarrhoea-mucosal disease virus**,  
monocytes-cattle, chemotaxis 47.
- Brachium conjunctivum**,  
rabbits, taste perception 1067.
- Brain**,  
rats, 2-deoxyglucose-uptake, neocortex/hypocampus lesions-effects on 1121.
- Brain lesions**,  
rats, olfactory discrimination 1392.
- Brandy**,  
aroma compounds, damascenone 1480.  
flavour compounds 201.  
polyphenolic compounds, wooden casks-effects on 198.
- Brassica campestris**,  
seeds, sinapine, quantification 294.
- Brassica napus**,  
seeds, sinapine, quantification 294.
- Bread**,  
aroma compounds, temperature effects 1542.  
flavour compounds, carbonyl compounds 950.  
organoleptic evaluation, potato flour-effects on 1577.  
peas/beans/lentils flour-effects on 1579.  
rye, taste panel evaluation 1578.  
taste panel evaluation, wheat meal, fermentation-effects on 1014.
- Breeds**,  
lamb, organoleptic evaluation 1028.
- Brevibacterium linens**,  
cheese, aroma compounds, S-methylthioacetate 949.
- Broccoli**,  
storage effects, off flavours/off odours, carbon dioxide-effects on 1559.
- Brood care**,  
Formica polyctena, antennal chemoreceptors 698.
- Bruchus pisorum**,  
oviposition 69.
- Brussel sprouts**,  
storage effects 236.  
off flavours, cultivation-effects on 1004.
- Budu**,  
aroma compounds, fermentation-effects on 962.
- Bufo boreas**,  
feeding behaviour 918.
- Bulbectomy**,  
see **Olfactory bulb**  
cattle, social behaviour 1364.  
Chrysemys d'orbigni, hypoglycemia 1113.  
gerbils, novelty habituation 938.  
hamsters, maternal behaviour 874.  
pigs, reproductive behaviour/aggressive behaviour/olfactory epithelium 1337.  
rats, avoidance learning, psychoactive drugs-effects on 156.  
rats, behaviour/11-hydroxycorticosterone activity 1123.  
rats, blood pressure/heart rate 1126.  
rats, EEG 1131.  
rats, feeding behaviour/drinking behaviour, hypothalamus (lateral) lesions-recovery of function 1405.  
rats, olfactory discrimination 1392.  
rats, olfactory tubercle, glutamic decarboxylase activities 1127.  
rats, olfactory tubercle, tyrosine hydroxylase activities 1122.  
rats, olfactory tubercles, choline acetyltransferase/glutamic acid decarboxylase-activities 1124.  
rats, predatory aggression, psychotropic drugs-effects on 1431.  
rats, prolactin 298.  
rats, sleep and wakefulness 1433.  
sheep, sex hormones-production 709.
- Burns**,  
leucocytes (neutrophilic)-man, chemotactic defects 1087.
- 2-Butanone**,  
coffee, off flavour, quantification 261.

**Buthus occitanus**,  
feeding behaviour, pedipalp chemoreceptors 107.  
**Butyric acid**,  
rats, food intake 167.  
 **$\gamma$ -Butyrolactone**,  
wine, aroma compounds 967.

**Calcium**,  
soy curd, organoleptic evaluation 1584.  
transport, *Dictyostelium discoideum*, chemotaxis, role 749.  
**Calcium receptors**,  
frogs, tongue, protease/phospholipase/neuraminidase-effects  
on 1065.

**Callinectes sapidus**,  
predatory behaviour 1321.  
**Calliphora vicina**,  
taste perception, mobility-effects on 797.

**Callosamia promethea**,  
pheromones, circadian rhythms 1231.

**Calomyrmex**,  
mandibular glands secretions, volatiles 843.

**Camphor**,  
*Ambystoma tigrinum*, odour aversion learning, avoidance  
behaviour 1366.

**Camphor receptors**,  
rats, olfactory epithelium 705.

**Canidae**,  
olfactory perception 173.

**Canis latrans**,  
marking behaviour 1359.

**Capreolus capreolus**,  
chemical communication 1362.  
marking behaviour 1363.

**Capsaicin**,  
*Capsicum annuum*, pungent principles 1514.

**Capsicum**,  
see **Pepper**  
**Capsicum annuum**,  
pungent principles, capsaicin 1514.

**Capsicum frutescens**,  
volatiles 1463.

**Captopril**,  
man, taste disorders 691.

**Carassius auratus**,  
see **Goldfish**  
olfactory bulb/telencephalon-relationship 1108.

**Carbaryl**,  
*Spodoptera frugiperda*, food selection 105.

**Carbohydrates**,  
bitterness, structure-activity relationships, hydrophobicity  
975.

**Carbon dioxide**,  
beans, storage effects 995.  
broccoli, storage effects, off flavours/off odours 1559.  
*Culicidae*, orientation 844.  
turtles, pulmonary chemoreceptors, respiration 39.

**Carbondioxide receptors**,  
possum, pulmonary stretch receptors 675.

**Carbonyl compounds**,  
bread, flavour compounds 950.  
meat, flavour compounds 1473.

**Cardiac glycosides**,  
*Chrysolina herbacea*, defence secretions, bitterness 127.

**Carnivora**,  
marking behaviour, evolution 1358.  
olfactory perception 173.

**Carnosine**,  
gecko, olfactory bulbs 11.  
mice, olfactory bulbs/olfactory epithelium 29.

**Carnosine synthetase**,  
mice, olfactory bulbs/olfactory epithelium 29.

**Carollia perspicillata**,  
taste aversion learning 1394.

**Carotid bodies**,  
dogs, dopamine/norepinephrine-effects on 41.  
cats, acetylcholine 1145.  
cats, respiration 1070.  
rats, tyrosine hydroxylase-activity 1143.

**Carotid chemoreceptors**,  
dogs, almitrine-effects on 1147.

**Carotid reflex**,  
dogs, hypoxia-effects on 42.

**Carotid sinus nerve**,  
cats, chemoreceptors reflexes 1071.

**Carp**,  
tectum opticum, skin chemoreceptors 672.

**Carrots**,  
dehydration-effects on 996.  
organoleptic evaluation, flavour compounds 1458.  
volatiles, trapping 1459.

**Carum carvi**,  
essential oils, *Sclerotinia sclerotiorum*-effects on 1518.

**Caryophyllene**,  
*Chrysopa carnea*, attractants 1304.

**$\beta$ -Caryophyllene**,  
*Anthonomus grandis*, pheromones 1230.

**Casein**,  
leucocytes (neutrophilic), chemotaxis 1177.

**Cassava**,  
lactic acid bacteria-effects on 1541.

**Castanea creata**,  
volatiles 1517.

**Caste determination**,  
*Melipona quadrifasciata*, 9-oxo-decenoic acid-effects on 1313.

**Castor canadensis**,  
marking behaviour 891, 1356, 1357.

**Castration**,  
rats, reproductive behaviour, urine odours-response 1336.  
rats/hamsters, olfactory bulb, noradrenaline-content 706.

**Catostomidae**,  
storage effects 1010.

- Catostomus commersoni**,  
homing behaviour 932.
- Cats**,  
amygdala, lateral olfactory tract/substantia innominata/  
sylvian gyri stimulation-effects on 1059.  
aortic body/carotid body, respiration 1070.  
aortic nerves, horseradish peroxidase transport, peripheral  
chemoreceptors 1146.  
carotid body/aortic chemoreceptors, acetylcholine 1145.  
carotid sinus nerve, chemoreceptors reflexes 1071.  
chemoreceptors, tumours 1624.  
hippocampus, olfactory stimuli-effects on 1060.
- medullary chemoreceptors, respiration, temperature effects  
40.
- prepyriform cortex/hippocampus-pathway 1134.
- swallowing reflex, basal fore brain-role 33.
- Cattle**,  
feeding behaviour, Firanor-24-effects on 1421.  
food intake, elfazepam-effects on, review 1422.
- hormones-effects on, Haematobia irritans, attractants 134.
- manure, deodorization 1528.
- monocytes, chemotaxis, bovine diarrhoea-mucosal disease  
virus-effects on 47.
- olfactory mucosa, proteins 1105.  
social behaviour, bulbectomy-effects on 1364.
- Caudate nucleus lesions**,  
rats, avoidance learning 904.
- Cavia aperea**,  
chemical communication, urine odours 888.
- Cavia porcellus**,  
see Guinea-pigs
- Cedar**,  
essential oils 215.
- Celery**,  
flavour compounds, tissue culture 1455.
- Cell culture**,  
Plodia interpunctella, pheromones glands 1033.
- Cell membranes**,  
macrophages-guinea-pigs/monocytes-man, chemotaxis 1164.
- Cell permeability**,  
Salmonella typhimurium/Escherichia coli, chemotaxis 291.
- Cell surface receptors**,  
Dictyostelium discoideum 60.
- Ceratitis capitata**,  
attractants, methyl (E)-6-nonenote 811.  
reproductive behaviour, pheromones, radiation ( $\gamma$ )-effects on  
75.  
traps baits, trimedlure 812.
- Cereals**,  
taints, coupon inserts-effects on 246.
- Charcoal (activated)**,  
sweeteners, sucrose 297.
- Cheddar cheese**,  
flavour compounds 186.  
flavour compounds, enzymes-effects on 1538.  
flavour compounds, sulphur compounds 185.  
organoleptic evaluation 270.  
proteinase-effects on 1539.  
taste panel evaluation, quality control 271.
- Cheese**,  
aroma compounds, S-methylthioacetate, Brevibacterium  
linens 949.  
aroma compounds, sulphur compounds 951.  
Cheddar, proteinase-effects on 1539.
- Cheddar cheese, flavour compounds 186.
- Cheddar cheese, flavour compounds, enzymes-effects on  
1538.
- Cheddar cheese, flavour compounds, sulphur compounds  
185.
- Cheddar cheese, organoleptic evaluation 270.
- flavour compounds, lactic acid bacteria-effects on 990.
- Latin American white cheese, taste panel evaluation 269.
- Minas, organoleptic evaluation, temperature-effects on 1574.
- taste panel evaluation, quality control 271.
- Cheloderus chidreni**,  
reproductive behaviour 76.
- Chemical communication**,  
Acomys cahirinus 872.  
Capreolus capreolus 1362.  
Cavia aperea/Cavia porcellus, urine odours 888.  
Clethrionomys glareolus/Apodemus flavicollis 885.
- ducks, uropygial gland secretions 150.
- mammals, population regulation 882.  
Megaponera foetens, predation 1263.  
reindeer, social behaviour 895.  
Sceloporus occidentalis 883.
- Chemical perception**,  
Nerita tessellata 863.  
Sauria/Serpentes, evolution 933.
- Chemokinesis**,  
leucocytes, inflammation, review 1165.  
leucocytes (polymorphonuclear) 1192.  
lymphocytes-man, assays 1168.
- Schistosoma mansoni 66.
- Chemoreception**,  
mathematical models 1050.
- Chemoreceptors**,  
dogs, reflexes, baroreceptors-effects on 1072.  
dogs/cats, tumours 1624.  
Tursiops truncatus/Delphinus delphus/Phocoena phocoena  
1150.
- Chemoreceptors reflexes**,  
cats, carotid sinus nerve 1071.  
man, haloperidol-effects on 1149.
- Chemotactic defects**,  
leucocytes (neutrophilic)-man, burns 1087.  
man, lymphocytes (neutrophilic) 1086.  
man, systemic lupus erythematosus 1088.
- Chemotactic factor**,  
leucocytes (polymorphonuclear)-man, peptide synthesis 737.
- man, isolation 44.
- chemotactic factors-man, biosynthesis 1156.  
complement C5a, structure/function 1155.



**Chemotactic factors, (continued)**

immunoglobulin G-rabbits 45.

inactivation, myeloperoxidase-effects on 1154.

leucocytes (neutrophilic)-interaction, review 1178.

leucocytes (neutrophilic)-man, AMP (cyclic) 1190.

leucocytes (neutrophilic)-man, N-formyl-L-methionyl-L-phenylalanine-adherence 1189.

leucocytes (neutrophilic)-rabbits, response 1183.

leucocytes (polymorphonuclear)-man, fluorescent probes 1199.

leucocytes (polymorphonuclear)-rabbits, structure-activity relationships 1194.

*Listeria monocytogenes*, macrophages, rats, chemotaxis 1171.

macrophages-guinea-pigs, secretion 1170.

macrophages-man, release 1159.

man, complement deficiency 1101.

man, inflammation 1157.

man, serum, isolation/characterization 1152.

mixed leucocyte reaction-mice 726.

*Propionibacterium acnes*, leucocytes (polymorphonuclear) 1195.*Propionibacterium acnes*/*Propionibacterium granulosum*/*Staphylococcus epidermidis*, man, skin diseases 1153.

receptors, leucocytes (eosinophilic)-man 1161.

receptors, leucocytes (neutrophilic), man 723.

*Staphylococcus aureus*, induction 735.*Staphylococcus aureus*, leucocytes (polymorphonuclear)-man, chemotaxis 1158.**Chemotactic factors receptors,**

leucocytes (neutrophilic) 1179.

leucocytes (neutrophilic)-rabbits 1182.

man, promyelocytic leukaemia cells 715.

**Chemotaxis,**

ACDAS, quantification 289.

*Agrobacterium* 741.*Bacillus subtilis*, protonmotive force 1205.

bacteria, regulation, review 1204.

*Chromatium vinosum*/*Rhodospseudomonas sphaeroides* 54.*coelomocytes-Lumbricus terrestris* 43.*Dictyostelium discoideum*, AMP (cyclic) receptors 61.*Dictyostelium discoideum*, AMP (cyclic)-role 1218.*Dictyostelium discoideum*, calcium transport-role 749.*Dictyostelium discoideum* 751.*Dictyostelium*/*Polysphondylium*, negative, repellents 750.*Dunaliella tertiolecta* 64.*Escherichia coli*, galactose-binding protein/glucose-binding protein/maltose-binding protein/ribose-binding protein 55.*Escherichia coli*, galactose receptors 1207.*Escherichia coli*, genetics 57.*Escherichia coli*, genetics, methyl-N-methyl anthranilate-effects on 58.*Escherichia coli*, methylation 1210.*Escherichia coli*, methylation/demethylation 744.*Escherichia coli*, mutants, genetics 1208.*Escherichia coli*, preferences-behaviour 743.*Escherichia coli*, proteins-demethylation 1206.*Escherichia coli*, transduction, genetics 1209.*Escherichia coli*/*Dugesia dorotocephala*, assays 1602.*Escherichia coli*/*Salmonella typhimurium*, genetics 56.*Euglena gracilis*, phototaxis 756.haemocytes-*Crassostrea virginica*, bacteria-effects on 46.*Halobacterium halobium* 745, 1211.

leucocytes (eosinophilic)-man, immunoglobulin A paraproteins-effects on 718.

leucocytes (eosinophilic)-man, mono-hydroxy-eicosatetraenoic acids-effects on 1160.

leucocytes (eosinophilic)-man, serum enhancing factor 717.

leucocytes (granulocytic)-man, *Escherichia coli*/*Staphylococcus aureus*-chemotactic factors 1163.

leucocytes (granulocytic)-man, storage effects, ATP-role 1162.

leucocytes, inflammation, review 1165.

leucocytes, inflammation exudates 1166.

leucocytes, mathematical models 1201.

leucocytes (neutrophilic), ascorbic acid-effects on 1176.

leucocytes (neutrophilic), casein-effects on 1177.

leucocytes (neutrophilic), *Cryptococcus neoformans*-effects on 722.

leucocytes (neutrophilic), quantification 290.

leucocytes (neutrophilic)-guinea-pigs, *Bacteroides**melanogenicus*/*Bacteroides asaccharolyticus*/*Fusobacterium nucleatum*/*Peptococcus anaerobius*-effects on 1181.

leucocytes (neutrophilic)/leucocytes (eosinophilic)-man, regulation, review 1184.

leucocytes (neutrophilic)-man 724.

leucocytes (neutrophilic)-man, AMP (cyclic)-effects on 49.

leucocytes (neutrophilic)-man, antiinflammatory drugs-effects on 48.

leucocytes (neutrophilic)-man, arachidonic acid derivatives-effects on 1186.

leucocytes (neutrophilic)-man, bacteria infection-effects on 1085.

leucocytes (neutrophilic)-man, beta adrenergic blocking agents-effects on 725.

leucocytes (neutrophilic)-man, leukaemia 1098.

leucocytes (neutrophilic)-man, monohydroxy-

eicosatetraenoic acids-effects on 1188.

leucocytes (neutrophilic)-man, psoriasis 692.

leucocytes (neutrophilic)-man, *Staphylococcus aureus* furunculosis-effects on 1185.

leucocytes (neutrophilic)-man, storage effects 1187.

leucocytes (neutrophilic)-man/rabbits/guinea-pigs/pigs 1175.

leucocytes (neutrophilic)/monocytes-man, cystic fibrosis-effects on 695.

leucocytes (neutrophilic)-rabbits, AMP (cyclic)-contents 1202.

leucocytes (phagocytic), review 1203.

leucocytes (polymorphonuclear) 1192.

leucocytes (polymorphonuclear), *Bacteroides fragilis*-effects on 1191.

leucocytes (polymorphonuclear)-guinea-pigs, dansyl chloride-effects on 730.

leucocytes (polymorphonuclear)-man, adherence 734.

leucocytes (polymorphonuclear)-man, arachidonic acid-effects on 51.

**Chemotaxis, (continued)**

leucocytes (polymorphonuclear)-man, bacteria infection-effects on 1197.  
 leucocytes (polymorphonuclear)-man, cigarette smoking-effects on 738.  
 leucocytes (polymorphonuclear)-man, cooperation 732.  
 leucocytes (polymorphonuclear)-man, endotoxins-effects on 50.  
 leucocytes (polymorphonuclear)-man, influenza A virus-effects on 1100.  
 leucocytes (polymorphonuclear)-man, microtubules, ascorbic acid-effects on 729.  
 leucocytes (polymorphonuclear)-man, microtubules-role 733.  
 leucocytes (polymorphonuclear)-man, neonates 736.  
 leucocytes (polymorphonuclear)-man, sepsis 25.  
 leucocytes (polymorphonuclear)-man, serum-effects on 1196.  
 leucocytes (polymorphonuclear)-man, *Staphylococcus aureus*, chemotactic factors 1158.  
 leucocytes (polymorphonuclear)-rabbits, *Bacteroides fragilis*-lipopolysaccharides, antibodies 731.  
 leucocytes (polymorphonuclear)-rats, benoxaprofen-effects on 728.  
 leucocytes (polymorphonuclear)-rats, cholera toxin-effects on 52.  
 leucocytes (polymorphonuclear)-rats, inflammation 1193.  
 leucocytes (polymorphonuclear)-rats, inhibition, inflammation-relationship 727.  
 leucocytes-man, tetracyclines-effects on 719.  
 leucocytes-*Schistosoma mansoni*, *Schistosoma mansoni*-effects on 1180.  
 leukaemia cells, genetics 1151.  
 leukocytes (polymorphonuclear)-man, leukotriene B-effects on 1200.  
 lymphocytes-man, assays 1168.  
 lymphocytes man, Fc receptors, relationship 714.  
 macrophages, rats, *Listeria monocytogenes*, chemotactic factors 1171.  
 macrophages-guinea-pigs, ageing/nutrition-effects on 720.  
 macrophages-guinea-pigs, methylation 53.  
 macrophages-guinea-pigs/monocytes-man, cell membranes-role 1164.  
 macrophages-mice, assays 1601.  
 macrophages-mice, tetracyclines-effects on 1169.  
 man-leucocytes, heparin-effects on 1167.  
*Megalodiscus temperatus*, host location 1221.  
 monocytes-cattle, bovine diarrhoea-mucosal disease virus-effects on 47.  
 monocytes-man, acute lymphoblastic leukaemia 1084.  
 monocytes-man, assays 1600.  
 monocytes-man, Kveim antigen-effects on, sarcoidosis 721.  
 monocytes-man, prednisolone-effects on 1174.  
 monocytes-mice, osteosarcoma-effects on 1173.  
*Paramecium aurelia*, swimming behaviour 65.  
*Physarum polycephalum*, acidity-effects on 752.  
*Physarum polycephalum*, AMP (cyclic)-effects on 753.

*Physarum polycephalum*, 3':5'-cyclic-nucleotide phosphodiesterase-role 754.

*Physarum polycephalum*, mechanisms 62.

*Physarum polycephalum*, membrane potential 1219.

*Physarum polycephalum*, plasmodia oscillation-mechanisms 755.

*Physarum polycephalum*/*Tetrahymena*, membrane potential 1220.

*Phytophthora megasperma*-zoospores, *Medicago sativa* 63.

protein carboxyl-methylase, role 739.

*Pseudomonas aeruginosa*, tyrosine chemoreceptors 746.

*Rhizobium* 1213.

*Rhizobium meliloti*, genetics 1212.

*Rhodopseudomonas spheroides*, membrane potential 1214.

*Salmonella typhimurium*, galactose receptors 747.

*Salmonella typhimurium*, proteins modification reagents effects on 1215.

*Salmonella typhimurium*, tumbling 59.

*Salmonella typhimurium*/*Escherichia coli*, cell permeability 291.

*Salmonella typhimurium*/*Escherichia coli*, electron transport-role 742.

*Salmonella typhimurium*/*Escherichia coli*, metals-citrate complex-effects on 748.

*Tetrahymena pyriformis*, membrane potential 1222.

*Vibrio cholerae* 1216, 1217.

**Cherries,**

phenolic compounds 1466.

**Chest glands,**

*Galago crassicaudatus*, secretions 941.

**Chickens,**

aversion learning 1367, 1368.

avoidance behaviour, blood odours-effects on 935, 936.

feeding behaviour 920.

flavour compounds, sulphur compounds 193.

food preferences, development 934.

*Notophthalmus viridescens*/*Pseudotriton*, palatability 1396.

off flavours, warmed-over-flavour, phospholipids/triglycerides-role 1011.

off odours, bacteria-effects on 255, 260.

off odours, vacuum packaging-effects on 258.

olfactory bulb 1115.

taste aversion learning, food preferences 153.

taste panel evaluation, formic acid-effects on 1585.

taste panel evaluation, rapeseed diets-effects on 1587, 1588.

volatiles, off odours, isobutyronitrile/isobutyraldoxime O-methyl ether/methacrylonitrile/methacrylaldoxime O-methyl ether 195.

**Chickpea meal,**

beef loaves, organoleptic evaluation 1026.

**Chili pepper,**

rats, taste preferences 1408.

- Chilling**,  
beef, organoleptic evaluation 280.
- Chilo partellus**,  
pheromones, (Z)-11-hexadecenal/(Z)-11-hexadecen-1-ol 77.
- Chilo suppressalis**,  
pheromones, (Z)-13-octadecenal-synthesis 1442.
- reproductive behaviour, pheromones-effects on 1232.
- Chiroptera**,  
taste aversion learning 1394.
- Chlordiazepoxide**,  
rats, food selection 1410.
- p-Chlorophenylalanine**,  
gerbils, marking behaviour 1354.
- Chlorophyta**,  
volatiles, dimethyl sulphide 968.
- Cholera toxin**,  
leucocytes (polymorphonuclear)-rats, chemotaxis 52.
- Choline acetyltransferase**,  
rats, olfactory bulbs 1133.
- rats, olfactory tubercles, bulbectomy-effects on 1124.
- Chologaster agassizi**,  
feeding behaviour 917.
- Choristoneura fumiferana**,  
reproductive behaviour, pheromones, attraction/disruption 765.
- Choristoneura fumiferana**,  
pheromones, trans-11-tetradecenyl acetate 764.
- reproductive behaviour, pheromones 762.
- reproductive behaviour, pheromones-effects on 763.
- traps baits, pheromones 813.
- Choristoneura occidentalis**,  
traps baits, pheromones 825.
- Choristoneura rosaceana**,  
pheromones 78.
- Chromatium vinosum**,  
chemotaxis 54.
- Chromatography (gas)**,  
apples, volatiles, quantification 190.
- essential oils, review 292.
- Chromatography (gas-liquid)**,  
essential oils 1519.
- Chromatography (high-performance liquid)**,  
beer, bitter acids 1614.
- licorice, flavour compounds, glycyrrhizin 952.
- Chromatography (high-pressure liquid)**,  
Acilius, defence secretions 1034.
- Chromatography (liquid)**,  
Gentianae, bitter principle 1512.
- Swertiae, bitter principle 1511.
- Chromium**,  
Atlanto-astacus pallipes pallipes, feeding behaviour 1271.
- Chrysemys d'orbigni**,  
hypoglycemia, bulbectomy-effects on 1113.
- Chrysemys picta**,  
reproductive behaviour 864.
- Chrysolina herbacea**,  
defence secretions, cardiac glycosides, bitterness 127.
- Chrysomelidial**,  
Gastrophysa atrocyanea/Phaedon brassicae, defence secretions 850.
- Chrysopa carnea**,  
attractants, caryophyllene 1304.
- Chrysophyta**,  
volatiles, dimethyl sulphide 968.
- Cider**,  
organoleptic evaluation, bitterness 285.
- Cigarette smoking**,  
leucocytes (polymorphonuclear)-man, chemotaxis 738.
- Circadian rhythms**,  
Callosamia promethea, pheromones 1231.
- Culex pipiens quinquefasciatus**, flight activity, pheromones-effects on 1305.
- man, taste sensitivity/olfactory sensitivity 1074.
- Cirolana sulcatauda**,  
deutocerebrum 702.
- Cirrhinus mrigala**,  
palate, taste buds 711.
- palates, taste buds 710.
- Citral**,  
lemon, essential oils, quantification 1611.
- lemons, flavourings, instability 953.
- Citric acid**,  
rats, food intake 167.
- Citronella**,  
Cymbopogon nardus, essential oils, temperature effects 1521.
- Citrus iyo**,  
essential oils, aroma compounds 1461.
- Citrus natsudaoidai**,  
bitterness, naringinase-effects on, thermal stability 972.
- Citrus paradisi**,  
essential oils, seeds 217.
- Citrus reticulata**,  
essential oils, seeds 217.
- Citrus sinensis**,  
essential oils, seeds 217.
- Citrus unshiu**,  
satsuma juice, taste panel evaluation 1581.
- Clams**,  
flavourings, preparation 1622.
- Clethrionomys glareolus**,  
chemical communication 885.
- marking behaviour 1349.
- Clibanarius vittatus**,  
predatory behaviour 1321.
- Cloves**,  
storage effects, off flavour, essential oils 1005.
- Syzygium aromaticum, phenolic compounds 1628.
- Cocaine**,  
rats, taste aversion learning 913.
- Cocaine analogues**,  
rats, taste aversion learning 1370.
- Cochliomyia hominivorax**,  
attractants, swormlure 814.
- Cocoa butter**,  
sorption, flavour compounds 948.
- Cod**,  
off flavour, hept-cis-4-enal 963.
- off flavours, storage effects, starvation-effects on 254.
- Coelenterata**,  
feeding behaviour 803.
- Coelotes terrestris**,  
reproductive behaviour, maze equipment 1031.
- Coffee**,  
ageing, quantification 293.
- aroma compounds, storage changes 197.
- off flavour, 2-methylfuran/2-butanone, quantification 261.
- off flavours, aroma compounds 196.
- off odours, packaging-effects on 262.
- organoleptic evaluation, storage effects 283.
- storage, effects-oxygen 239.
- Colias**,  
reproductive behaviour, pheromones 1234.



- Colias eurytheme**,  
reproductive behaviour, pheromones 1233.
- Colias philodice**,  
reproductive behaviour, pheromones 1233.
- Colisa labiosa**,  
reproductive behaviour 1326.
- Colisa lalia**,  
reproductive behaviour 1326.
- Collection**,  
plums, aroma compounds, Porapak Q 1609.
- Colletes validus**,  
reproductive behaviour, pheromones 79.
- Collybia impudica**,  
flavour compounds, epilitinic acid 1460.
- Colupulone**,  
hops, bitterness 1502.
- Communication**,  
review 1424.
- Complement C3b receptors**,  
monocytes-receptors 1172.
- Complement C5a**,  
chemotactic factors, structure/function 1155.
- Complement deficiency**,  
man, chemotactic factors 1101.
- Computer models**,  
olfactory bulb 1049.
- Conditioning**,  
rats, taste preferences 157.
- rats, taste preferences 921.
- Conference**,  
cells, motility 1044.
- essential 301.  
essential oils 302.
- Weurman Symposium 1627.
- Conspecific**,  
*Peromyscus maniculatus/Dipodomys agilis/Dipodomys merriami/Perognathus fallax*, interspecific odours-effects on 1350.
- Conspecific odours**,  
*Drosophila melanogaster*, maze learning 848.  
foxes, marking behaviour 892.
- rats, scavenging behaviour, food preferences 166.
- Contact chemoreceptors**,  
*Yponomeuta*, phagostimulants/phagorepellents-effects on 1062.
- Cooking**,  
beef patties, off flavour 1567.
- Coriandrum sativum**,  
essential oils, Sclerotinia sclerotiorum-effects on 1518.
- Corn chips**,  
off flavours, bitterness, germination-effects on 245.
- taste panel evaluation, wheat meal, fermentation-effects on 1014.
- Corn flour**,  
extrusion, tortillas, organoleptic evaluation 274.
- Corn-on-the-cob**,  
off flavours, peroxidase-relationship 249.
- Coryneform bacteria**,  
flavour compounds/off flavours 947.
- Coryphaenoides acrolepis**,  
organoleptic evaluation, storage effects 1020.
- Costelytra zealandica**,  
attractants, phenols 815.
- Courtship behaviour**,  
see **Reproductive behaviour**
- Cowpea powder**,  
off flavours 1002, 1003.
- Cows**,  
see **Cattle**
- Coyote**,  
marking behaviour 1359.
- Crassostrea virginica**,  
haemocytosis, chemotaxis, bacteria-effects on 46.
- Creme hair rinse**,  
fragrances 228.
- Crioceris duodecimpunctata**,  
oviposition, pheromones-effects on 1235.
- Crocidura russula**,  
marking behaviour 1348.
- Crops baits**,  
*Euxoa tristicula*, attractants, Z-9-dodecenyl acetate/n-dodecyl acetate 818.
- Crotalus**,  
predatory behaviour 919.
- Crotaphopeltis hotamboeia**,  
olfactory perception, tongue-role 1112.
- Crowding**,  
*Tisbe*, larvae production 790.
- Cruciferae**,  
volatiles, *Delia brassicae*, attractants 96.
- Cryo-ultramicrotomy**,  
*Bombyx mori*, antennal chemoreceptors 1599.
- Cryptococcus neoformans**,  
leucocytes (neutrophilic), chemotaxis 722.
- Cryptolestes ferrugineus**,  
aggregation behaviour, pheromones 128.
- Cucullia umbratica**,  
attractants, pheromones 1294.
- Culex fasciatus**,  
repellents 1278.
- Culex pipiens**,  
oviposition 1237.  
repellents 1278.
- Culex pipiens quinquefasciatus**,  
flight activity, circadian rhythms, pheromones-effects on 1305.
- attractants/repellents 1236.
- Culex tarsalis**,  
oviposition 1237.  
oviposition, attractants/repellents 1236.
- Culicidae**,  
orientation, carbon dioxide-effects on 844.
- Cultivation**,  
Brussels sprouts, off flavours 1004.
- Curing**,  
ham, organoleptic evaluation 1029, 1592.
- Cyanophyta**,  
volatiles, dimethyl sulphide 968.
- 3':5'-Cyclic-nucleotide phosphodiesterase**,  
*Physarum polycephalum*, chemotaxis 754.
- Cyclohexyl Phenylacetate**,  
*Trichodes ornatus*, traps baits 124.
- Cydia pomonella**,  
traps baits, pheromones 109, 1279.
- Cymbopogon nardus**,  
essential oils, citronella, temperature effects 1521.

- Cypress**,  
essential oils, *Cupressus sempervirens* 218.
- Cyprinidae**,  
olfactory organs 1110.
- Cypriniformes**,  
olfactory epithelium 1109.
- Cypripedium calceolus**,  
pollination, *Andrena haemorrhoa* 1300.
- Cystic fibrosis**,  
man, leucocytes (neutrophilic)/monocytes, chemotaxis 695.
- Dacus neohumeralis**,  
rectal glands, pheromones 766.
- Dacus oleae**,  
oviposition 80.
- Dacus tryoni**,  
rectal glands, pheromones 766.
- Damascenone**,  
whiskey/brandy/rum/wine/beer, aroma compounds 1480.
- $\beta$ -Damascenone**,  
*Rosa damascena*, synthesis 205.
- Dansyl chloride**,  
leucocytes (polymorphonuclear)-guinea-pigs, chemotaxis 730.
- Dardanus arrosor**,  
anti-predator behaviour 862.
- Dasyatis sabina**,  
olfactory organs, electrophysiological recording, amino acids-effects on 1054.
- Dates**,  
off flavours, storage effects 1001.
- Debittering**,  
bitterness, protein hydrolysates 209.
- $\gamma$ -Decalactone**,  
strawberries, flavourings, quantification 1606.
- 2-Decen-1-ol**,  
*Sceliphron caementarium*, head secretions 143.
- 9-oxo-Decenoic acid**,  
*Melipona quadrifasciata*, caste determination 1313.
- (Z)-5-Decenyl acetate**,  
*Agrotis venerabilis*/*Euxoa alpinensis*, attractants 1227.
- Decerebration**,  
rats, methodology 288.
- Deer**,  
grazing, olfactory perception 1436.  
marking behaviour 1363.
- Defence mechanisms**,  
*Acanthaster planci*, saponins 916.  
*Aplysia brasiliana*, cis-dihydrodihydroxytyptin 147.  
*Bonellia viridis*, palatability 1322.
- Defence secretions**,  
*Acilius*, chromatography (high-pressure liquid) 1034.  
*Anterhynchium abdominale* 1301.  
*Chrysolina herbacea*, cardiac glycosides, bitterness 127.  
*Elasmucha grisea*, pheromones 131.  
*Gastrophysa atrocyanea*/*Phaedon brassicae*, chrysomelidial 850.  
*Graeffea crouani*, iridodials/nepetalactone 851.  
*Gyrinus frosti*/*Dineutus assimilis*, seasonal variations 130.  
*Linaidea aenea*/*Plagioderma versicolora distincta* 1312.
- Luehdorfia japonica*/*Luehdorfia puziloi*, myrcene 839.
- Defensive behaviour**,  
*Pheidole biconstricta*, pygidial gland 859.
- Dehydration**,  
carrots 996.
- Delia antiqua**,  
attractants, sulphur chemicals 113.
- Delia brassicae**,  
attractants, Cruciferae-volatiles 96.  
host location, review 97.  
host searching behaviour 95.  
oviposition, host searching behaviour 81.  
repellents, naphthalene 1280.  
tarsal chemoreceptors, host searching behaviour, oviposition 3.
- Delphins delphus**,  
chemoreceptors 1150.
- Demethylation**,  
*Escherichia coli*, chemotaxis 744.
- Dendroctonus brevicomis**,  
inhibition, *Ips paraconfusus*-pheromones 1307.  
pheromones, population dynamics 974.  
traps baits, pheromones 1281.
- Dendroctonus frontalis**,  
aggregation behaviour, pheromones 1306.  
pest control, frontalure 1282.
- Dendroctonus jeffreyi**,  
aggregation behaviour, pheromones, 1-heptanol/2-heptanol 129.
- Dendroctonus pseudotsugae**,  
attractants, 3-methylcyclohex-2-en-1-one 1283.  
pheromones/sound production, geographical variations 845.
- Dental caries**,  
man, taste thresholds-sweetness-relationship 23.
- Deodorants**,  
body odours, deosafe fragrances 227.
- Deodorization**,  
cattle, manure 1528.  
livestock housing 1532.  
onions/garlic processing, ozone-effects on 983.  
pigs housing 1531.  
pigs-manure 1529, 1530.
- Deosafe fragrances**,  
deodorants, body odours 227.
- 2-Deoxy-D-glucose**,  
rats, olfactory bulbs, uptake 1125.
- Deoxyglucose**,  
mice, olfactory bulb 1116.
- 2-Deoxyglucose**,  
rats, brain, neocortex/hypocampus lesions-effects on 1121.
- Dermestes maculatus**,  
pheromones, isopropyl carboxylates 846.  
reproductive behaviour, pheromones 767.
- Deroceras reticulatum**,  
feeding behaviour, chemical perception 804.
- ( $\pm$ )-Des-N-morphinan**,  
*Oryctes rhinoceros*, attractants 117.
- Desmognathus ochropheus**,  
homing behaviour 1338.
- Deterrents**,  
*Oryza*, *Nilaparvata lugens*, feeding behaviour 1264.
- Deutocerebrum**,  
*Ligia exotica*/*Cirolana sulcata* 702.
- Development**,  
sheep, taste buds, taste stimuli-response 1068.
- Diacrisia obliqua**,  
food selection 798.

- Dicotyles tajacu**, marking behaviour, preorbital gland 152.
- Dicrostonyx groenlandicus**, olfactory stimuli, memory 1328.
- Dictyostelium**, chemotaxis-negative, repellents 750.
- Dictyostelium discoideum**, cell surface receptors 60.
- chemotaxis, AMP (cyclic) receptors 61.
- chemotaxis, AMP (cyclic)-role 1218.
- chemotaxis, calcium transport-role 749.
- chemotaxis 751.
- Diets**, beef, organoleptic evaluation, fatty acids 279.
- eggs, organoleptic evaluation 1556.
- Microplitis croceipes**, kairomones 101.
- rapeseed, horses, food intake 1420.
- 2,3-Dihydro-2,3,5-trimethyl-6-(1-methyl-2-oxobutyl)-4H-pyran-4-one**, *Siegbium paniceum*, pheromones 787.
- 5,6-Dihydro-5-hydroxy-3,6-epoxy- $\beta$ -ionol**, tobacco, aroma compounds 1491.
- 2,3-Dihydro-5-hydroxy-6-methyl-4H-pyranone**, tobacco, aroma constituents 1489.
- cis-Dihydrodihodophytin**, *Aplysia brasiliana*, defence mechanisms 147.
- Dill**, *Peucedanum ferulaefolium*, essential oils 223.
- (Z)-3,3-Dimethyl- $\Delta^1\beta$ -cyclohexanethanol**, *Anthonomus grandis*, pheromones 1230.
- Dimethyl disulphide**, hamsters, reproductive behaviour, responses 867.
- Dimethyl sulphide**, freshwater microorganisms, volatiles 968.
- sake, off flavours 264.
- Dimethyl trisulphide**, hamsters, reproductive behaviour, responses 867.
- 3,11-Dimethyl-2-nonacosanone**, *Blattella germanica*, pheromones, synthesis 1441.
- (2)-3,7-Dimethyl-2,7-octadien-1-yl**, *Quadraspidiotus perniciosus*, pheromones 1241.
- (Z)-3,7-Dimethyl-2,7-octadien-1-yl propanoate**, *Quadraspidiotus perniciosus*, pheromones, synthesis 1446.
- 3,5-Dimethyl-4-(methylthio)phenol methylcarbamate**, wine 1552.
- (E)-3,9-Dimethyl-6-isopropyl-5,8-decadien-1-yl a**, *Aonidiella citrina*, pheromones 72.
- Aonidiella citrina*, pheromones, synthesis 942.
- 4,6-Dimethyl-7-hydroxy-nonan-3-one**, *Lasioderma serricorne*, pheromones 775.
- Dineutus assimilis**, defence secretions, seasonal variations 130.
- Dioscoreophyllum cumminsii**, monellin, reduction, enzymatic properties 1507.
- Diphenylhydantoin**, rats/gerbils/hamsters, sodium appetite 926.
- Dipodomys agilis**, conspecific/interspecific odours-effects on 1350.
- Dipodomys merriami**, conspecific/interspecific odours-effects on 1350.
- Diprion pini**, reproductive behaviour 768.
- Disparlure**, *Lymantria dispar*, attractants 1289.
- Lymantria dispar*, pest control, pheromones 826.
- Lymantria dispar*, traps baits, plastic dispensers 116.
- Ooencyrtus kuwanai*, parasitism 85.
- Dispersal**, *Zeiraphera diniana*, trans-11-tetradecenyl acetate-effects on 838.
- DNA biosynthesis**, rats, olfactory bulb 1132.
- (E,E)-8,10-Dodecadienyl acetate**, *Hedya nubiferana*, reproductive behaviour, pheromones 1223.
- (Z)-9-Dodecenal**, *Oidaematophorus monodactylus*, reproductive behaviour, attractants 1224.
- (E)-9-Dodecenyl acetate**, *Rhyacionia subtropicalis*, traps baits, pheromones 833.
- Zeiraphera diniana*, attractants 837.
- (Z)-7-Dodecenyl acetate**, *Agrotis venerabilis/Euxoa albipennis*, attractants 1227.
- (Z)-8-Dodecenyl acetate**, *Hedya nubiferana* reproductive behaviour, pheromones 1223.
- Z-9-Dodecenyl acetate**, *Euxoa tristicula*, crops baits, attractants 818.
- n-Dodecyl acetate**, *Euxoa tristicula*, crops baits, attractants 818.
- Dogs**, aortic chemoreceptors/carotid chemoreceptors, almitrine-effects on 1147.
- carotid bodies, dopamine/norepinephrine-effects on 41.
- carotid reflex, hypoxia-effects on 42.
- chemoreceptors, tumours 1624.
- chemoreceptors reflexes, baroreceptors-effects on 1072.
- heart, aortic body-effects on 1148.
- marking behaviour 151.
- pancreas secretions, taste stimuli-effects on 928.
- taste preferences 928.
- urine odours, oestrus, response 1333.
- Dolphins**, chemoreceptors 1150.
- Dopamine**, dogs, carotid bodies 41.
- mice, olfactory tubercle/septum/substantia nigra, aggressive behaviour-effects on 1118.
- rats, olfactory bulb, aggressive behaviour 1129.
- Dorema ammoniacum**, essential oils 219.
- Drinking behaviour**, rats, hypothalamus (lateral) lesions-effects on 923.
- rats, hypothalamus (lateral) lesions-recovery of function, bulbectomy-effects on 1405.
- rats, lithium-effects on 1401.
- Drosophila melanogaster**, avoidance learning, genetics 847.
- maze learning, conspecifics odours-effects on 848.
- mutants, quinine-effects on, genetics 799.
- reproductive behaviour, pheromones 769, 770.
- Drugs**, taste aversion learning, review 898.



- Drying,**  
raisins, temperature effects 1545.
- Duberria lutrix,**  
olfactory perception, tongue-role 1112.
- Ducks,**  
chemical communication, uropygial gland secretions 150.
- Dufour's gland,**  
Hymenoptera, secretions, volatiles 852.
- Melissodes desponsa/Melissodes denticulata,** secretions 857.
- Dufour's gland secretions,**  
**Halictus arenosus/Halictus rubicundus,** macrocyclic lactones 1309.
- Dugesia dorotocephala,**  
chemotaxis, assays 1602.
- Dunaliella tertiolecta,**  
chemotaxis 64.
- Dysdercus intermedius,**  
scent gland, linalool 206.
- Earias insulana,**  
attractants, pheromones, (E,E)-10,12-hexadecadienol 816.  
pheromones, (E,E)-10,12-Hexadecadienol 771.
- Early experience,**  
hamsters/rats, olfactory preferences, sex differences 1343.  
mice, olfactory preferences 1341.  
rats, food selection 1406.  
sheep, feeding behaviour 929.
- ECS,**  
rats, taste aversion learning 1384.
- EEG,**  
man, olfactometers 1094.  
rats, bulbectomy-effects on 1131.
- Eggs,**  
off flavour, trimethylamine 1557.  
off odours, rapeseed diets-effects on 242.  
organoleptic evaluation, protein diets-effects on 1556.  
taints, hens, trimethyl oxidase-activity 243.
- Eggs salads,**  
taste panel evaluation, acidity-effects on 1013.
- Eland,**  
mother-offspring interactions 879.
- Elasmucha grisea,**  
trail following behaviour/alarm behaviour/defence secretions,  
pheromones 131.
- Electric organs,**  
**Raja clavata/Trigon pastinaca,** salinity effects 1055.
- Electrical properties,**  
**Phormia regina,** labellar chemoreceptors, age-effects on 701.
- Electrical stimulation,**  
beef, taste panel evaluation 281.  
**Rana ridibunda,** olfactory cells 1056.
- Electro-olfactograms,**  
frog, olfactory epithelium, alcohols, structure-activity  
relationships 670.
- Electroantennogram,**  
**Adoxophyes orana,** antennal chemoreceptors, pheromones  
receptors 2.  
**Ips pini,** antennal chemoreceptors, pheromones 6.  
**Ips typographus,** pheromones receptors 4.  
**Leptinotarsa decemlineata,** antennal chemoreceptors, host  
searching behaviour 8.  
**Yponomeuta,** antennal chemoreceptors 9.  
insects 287.  
olfactometers, insects 1598.  
**Periplaneta americana,** antennal chemoreceptors,  
pheromones-effects on 667.  
Prays oleae, reproductive behaviour, pheromones, Z-7-  
tetradecen-1-al 91.
- Electron transport,**  
**Salmonella typhimurium/Escherichia coli,** chemotaxis, role  
742.
- Electrophysiological recording,**  
**Dasyatis sabina,** olfactory organs, amino acids-effects on  
1054.  
Insecta, methodology 666.  
olfactory bulb 1053.  
olfactory bulb, models 1052.  
pigeons, olfactory pathways 1058.
- Elifazepam,**  
cattle, food intake, review 1422.
- Emerita asiatica,**  
reproductive behaviour 788.
- Endotoxins,**  
leucocytes (polymorphonuclear)-man, chemotaxis 50.
- Environmental effects,**  
rats, taste aversion learning 1381.
- Enzymatic properties,**  
monellin/thaumatin, reduction 1507.
- Enzymes,**  
Cheddar cheese, flavour compounds 1538.  
flavourings, vegetables, synthesis 1450.
- Eosinophil chemotactic factor,**  
guinea-pigs, release 716.  
leucocytes (polymorphonuclear)-man, phospholipase A2/  
arachidonic acid-role 1198.
- Ephemeroptera,**  
predator-prey interactions, Plecoptera 1045.
- Ephestia cautella,**  
pest control, pheromones 817.  
reproductive behaviour, pheromones 1238.
- Epiglottis,**  
sheep, taste buds, development 1136.
- Epilachna varivestris,**  
feeding behaviour, Glycine max, host preference 98.
- Epilentic acid,**  
**Micromphale foetidum/Micromphale cauvetii/Collybia**  
impudica, flavour compounds 1460.
- Erigeron annuus,**  
essential oils 980.
- Escherichia coli,**  
chemotaxis, assays 1602.  
chemotaxis, cell permeability 291.  
chemotaxis, electron transport-role 742.  
chemotaxis, galactose-binding protein/glucose-binding  
protein/maltose-binding protein/ribose-binding protein 55.  
chemotaxis, galactose receptors 1207.  
chemotaxis, genetics 56, 57.  
chemotaxis, genetics, methyl-N-methyl anthranilate-effects  
on 58.  
chemotaxis, methylation 1210.  
chemotaxis, methylation/demethylation 744.

**Escherichia coli,(continued)**

chemotaxis, preferences-behaviour 743.  
 chemotaxis, proteins-demethylation 1206.  
 chemotaxis, transduction, genetics 1209.  
 leucocytes (granulocytic)-man, chemotaxis 1163.  
 mutants, chemotaxis, genetics 1208.

**Esox lucius**,  
 olfactory perception, trigeminal nerves 10.

**Essential oils**,  
 Angelica glauca 216.  
 caraway/anise/coriander/fennel/dill, Sclerotinia sclerotiorum-effects on 1518.  
 cedar 215.  
 chromatography (gas), review 292.  
 chromatography (gas-liquid) 1519.  
 Citrus iyo, aroma compounds 1461.  
 Citrus sinensis/Citrus reticulata/Citrus paradisi-seeds 217.  
 cloves, storage effects, off flavour 1005.  
 conference 302.  
 Cupressus sempervirens 218.  
 Cymbopogon nardus, citronella, temperature effects 1521.  
 Dorema ammoniacum 219.  
 Erigeron annuus 980.  
 eucalyptus 215.  
 grapefruit 215.  
 Helichrysum 220.  
 Juniperus deppeana/Juniperus osteosperma/Juniperus scopulorum, volatiles 1522.  
 Juniperus macropoda 221.  
 lavender/lavandin/spike lavender, aroma compounds, quantification 1038.  
 lemon, benzyl alcohol-quantification 1610.  
 lemon, citral-quantification 1611.  
 Ligusticum thomsonii 222.  
 Matricaria chamomilla 1523.  
 Monarda fistulosa 1524.  
 nutmeg 215.  
 Odocoileus hemionus, food selection 171.  
 organoleptic evaluation 276.  
 Peucedanum ferulaefolium 223.  
 Pimpinella stewartii 224.  
 Prangos pabularia 225.  
 review 214.  
 sandalwood, ( $\pm$ )- $\beta$ -santalene/( $\pm$ )- $\beta$ -santalol-synthesis 207.  
 Santalum album, santalol-synthesis 1497.  
 soaps, antimicrobial activity 982.

**Esterases**,  
 Trichoplusia ni, antennal chemoreceptors, pheromones-hydrolysis 1103.

**Ethanol**,  
 rats, taste aversion learning 912.

**Ethanol dependence**,  
 rats, taste aversion learning 911.

**Ethanol intake**,  
 rats, shock-effects on 1402.

**Ethyl lactate**,  
 wine, flavour compounds 1482.

**Ethyl oleate**,  
 raisins, off flavours 250.

**Ethyl-2-methyl-2-butenate**,  
 quince, flavour compounds 189.

**Eucalyptus**,  
 essential oils 215.

**Eucera longicornis**,  
 attractants, Ophrys 849.

**Eugenol**,

traps baits, Insecta 1286.

**Euglena gracilis**,

chemotaxis/phototaxis 756.

**Euphausia superba**,

aroma compounds, off odour 1470.

**Eurema hecabe**,

phagostimulants, Lespedeza cuneata 99.

**Eurois occulta**,

attractants, (Z)-11-hexadecenyl acetate 1443.

**Euroleon nostras**,

reproductive isolation, pheromones, nerol 1239.

**Euthochtha**,

abdominal gland secretions, volatiles 83.

**Euxoa albipennis**,

attractants, (Z)-5-decenyl acetate/(Z)-7-dodecenyl acetate 1227.

**Euxoa messoria**,

attractants, (Z)-11-hexadecenyl acetate 1443.

**Euxoa tristicula**,

crops baits, attractants, Z-9-dodecenyl acetate/n-dodecyl acetate 818.

**Evaporation**,

pheromones, insects, acetates, quantification 809.

**Evolution**,

Carnivora, marking behaviour 1358.

Sauria/Serpentes, chemical perception 933.

taste preferences/odour preferences, learning-role 897.

**Exploratory behaviour**,

gerbils 175.

**Extinction**,

rats, taste aversion learning 903.

**Eye stalk chemoreception**,

Astacus leptodactylus 26.

**Facial eczema**,

sheep meat, taste panel evaluation 1021.

**Fasting**,

man, hedonics 686.

**Fats**,

rancidity, phospholipids-effects on 251.

**Fatty acids**,

beef, organoleptic evaluation, diets-effects on 279.

pigs manures, volatiles 989.

polyunsaturated contents, pork, taste panel evaluation 1022.

**Fc receptors**,

lymphocytes-man, chemotaxis, relationship 714.

- Feeding,**  
*Anacridium melanorhodon/Locusta migratoria*, Acacia amino acids-effects on 1261.
- Atlanto-astacus pallipes pallipes, chromium-effects on 1271.  
*Bufo boreas* 918.
- Buthus occitanus*, pedipalp chemoreceptors 107.
- cattle, Firanor-24-effects on 1421.  
 chickens 920.  
*Chologaster agassizi* 917.  
*Coelenterata* 803.  
*Deroceas reticulatum*, chemical perception 804.
- Epilachna varivestris*, Glycine max, host preference 98.
- Helix lucorum*, metacerebral cells 805.  
*Homarus americanus*, antennule lesions-effects on 806. \*  
 Insecta, plants 1260.
- Locusta migratoria/Schistocerca gregaria*, maxillary palp chemoreceptors 12.  
*Lygus lineolaris*, rostral chemoreceptors 13.
- Nilaparvata lugens*, deterrents, *Oryza* 1264.  
*Protophormia terraenovae*, proboscis extension 1265.  
 rats, conspecifics, aversion 1409.  
 rats, hypothalamus (lateral) lesions-effects on 923.  
 rats, hypothalamus (lateral) lesions-recovery of function, bulbectomy-effects on 1405.  
 rats, hypothalamus (ventromedial) lesions-effects on 1404.  
*Sciurus aberti* 927.  
*Scylla serata* 1274.  
 sheep, early experience-effects on 929.  
*Spodoptera ornithogalli*, atranorin/vulpinic acid-effects on 1269.  
*Stichodactyla haddoni*, nematocytes 807.
- Feeding deterrents,**  
*Schistocerca gregaria*, *Hymenocallis littoralis*, alkaloids 1267.
- Felidae,**  
 olfactory perception 173.
- Felis domesticus,**  
 see Cats
- Fenfluramine,**  
 gerbils, marking behaviour 1354.
- Fermentation,**  
 bread/corn chips, wheat meal, taste panel evaluation 1014.  
 budu-fish, aroma compounds 962.
- Firanor-24,**  
 cattle, feeding behaviour 1421.
- Fish,**  
 budu, aroma compounds, fermentation-effects on 962.  
 skin mucilage, collection 1604.
- Fish sausages,**  
 organoleptic evaluation, mutton fat-effects on 237.
- Flavanones,**  
 oranges, flavour compounds, bitterness 211.
- Flavonoids,**  
 flavour compounds/aroma compounds 1492.
- Flavonol glycosides,**  
*Phyllotreta armoraciae*, phagostimulants 802.
- Flavour compounds,**  
 see Aroma compounds and Volatiles
- Allium*, L-5-alk(en)ylthiomethylhydantoin-(±)-S-oxide 956.
- beef-roasted 194.
- beer, characterisation 966.  
 beer, clarification-effects on 964.  
 beer, yeasts-effects on 1484.
- brandy 201.
- bread, carbonyl compounds 950.  
 carrots, organoleptic evaluation 1458.  
 celery, tissue culture 1455.
- Cheddar cheese 186.
- Cheddar cheese, enzymes-effects on 1538.
- Cheddar cheese, sulphur compounds 185.  
 chickens, sulphur compounds 193.
- coryneform bacteria-effects on 947.  
 flavonoids 1492.  
 food, amino acids 1476.
- food, book 300.
- food, synthesis 1452.  
*Glycyrrhiza glabra*, chromatography (high-performance liquid), glycyrrhizin 952.  
 goats milk 991.  
 Labiateae 981.  
 meat, carbonyl compounds 1473.  
 meat, legislation 1619.  
 meat, sulphur compounds 1474.  
*Micromphale foetidum/Micromphale cauvetii/Collybia impudica*, epilentic acid 1460.  
 milk/cheese, lactic acid bacteria-effects on 990.
- miso, bacteria-effects on 188.
- onions, tissue culture, alliinase 955.  
 onions, volatiles 1457.
- orange juice, review 235.  
 oranges, bitterness, flavanones 211.
- peaches, storage effects 1465.  
 potatoes, pyrazines/thiazoles 1462.
- quince, ethyl-2-methyl-2-butenate 189.
- salmon, smoking-effects on 1472.
- sausages, smoke flavourings 192.
- separation techniques 1036.
- smoke flavourings 181.
- smoke generator 1613.  
 sorption, cocoa butter 948.  
 soya sauce, 4-hydroxy-2-ethyl-5-methyl-3(2H)-furanone 1468.
- soybeans, bitterness, 9,12,13-trihydroxyoctadeca-10-enoic acid/9,10,13-trihydroxyoctadeca-11-enoic acid 191.



**Flavour compounds, (continued)**

tobacco, phytuberol 1496.

weeds, germination 296.

wine, acetoin/ethyl lactate 1482.

wine, review 1487.

yeasts lysates, Gistex-X-II 960.

yoghurt, volatiles 184.

**Flavourings,**

clams, preparation 1622.

lemons, citral, instability 953.

smoke, flavour compounds 181.

soya proteins 253.

strawberries, methyl cinnamate/ $\gamma$ -decalactone/maltol-quantification 1606.

toxicity 696.

vegetables, synthesis, enzymes-use 1450.

pigs, food intake 1418.

**Flight activity,**

*Culex pipiens quinquefasciatus*, circadian rhythms, pheromones-effects on 1305.

**Fluid intake,**

rats, taste aversion learning, naloxone-effects on 1371.

**Fluorescent probes,**

leucocytes (polymorphonuclear)-man, chemotactic factors 1199.

**Foeniculum vulgare,**

essential oils, *Sclerotinia sclerotiorum*-effects on 1518.

**Food,**

aroma compounds, legislation, Hungary 1621.

aroma compounds, microorganisms-effects on 1537.

flavour compounds, amino acids 1476.

flavour compounds, book 300.

flavour compounds, synthesis 1452.

off flavours, aldehyde dehydrogenase-effects on 1000.

organoleptic evaluation 267.

**Food intake,**

cattle, elfazepam-effects on, review 1422.

horses, rapeseed diets-effects on 1420.

pigs, flavourings-effects on 1418.

pigs, palatability-effects on 169.

rats, hypothalamus (ventromedial) lesions-effects on 164.

rats, insulin/tolbutamide-effects on  $0 \pm \infty$  924.

rats, quinine/acetic acid/butyric acid/citric acid-effects on 167.

**Food preferences,**

chickens, taste aversion learning 153.

chickens/rats/birds, development 934.

invertebrates 791.

multidimensional scaling models 1573.

*Odocoileus hemionus*, *Juniperus doppeana*/*Juniperus osteosperma*/*Juniperus scopulorum* 1419.

*Phyllotreta nemorum*/*Phyllotreta undulata*/*Phyllotreta armoraciae*/*Phyllotreta tetrastigma* 104.

pigs 170.

rats, bitterness/sourness, weaning experience-effects on 165.

rats, learning, mother-offspring interactions/social interactions 876.

rats, scavenging behaviour, conspecifics odours-effects on 166.

**Food selection,**

*Akodon olivaceus*/*Oryzomys longicaudatus* 1398.

*Diacrisia obliqua* 798.

*Iridomyrmex humilis*, *Vicia* 800.

*Lepus americanus* 168.

man, taste preferences 684.

*Marmota monax* 1416.

*Odocoileus hemionus*, essential oils-effects on 171.

rats, chlordiazepoxide-effects on 1410.

rats, early experience-effects on 1406.

Spodoptera frugiperda, carbaryl-effects on 105.

**Foraging,**

mice, olfactory nerves lesions-effects on 1399.

**Foraging behaviour,**

*Aphaenogaster subterranea*, recruitment 794.

Apis, herbicides-effects on 796.

Apis mellifera, pheromones 795.

**Forebrain,**

cats, swallowing reflex 33.

**Formic acid,**

chickens, taste panel evaluation 1585.

tobacco, quantification 1612.

**Formica polyctena,**

antennal chemoreceptors, brood care 698.

**Formica rufa,**

nursing behaviour, pheromones-effects on 1308.

**Formica sanguinea,**

trail following behaviour, pheromones 132.

**Formicidae,**

Termitidae, repellents 146.

**N-Formyl-L-Methionyl-L-Phenylalanine,**

leucocytes (neutrophilic)-man, chemotactic factors 1189.

**Fortification,**

arepas, taste panel evaluation 273.

**Foxes,**

bat-eared fox, marking behaviour 1360.

marking behaviour 893, 1361.

marking behaviour, conspecifics odours-effects on 892.

**Fragrances,**

legislation, toxicity 976, 977.

shampoo/creme hair rinse 228.

soaps, antimicrobial activity 982.

**Frankfurters,**

off flavours, proteins-effects on 257.

**Freezing,**

beef 1551.

soybeans, off flavour 1562.

**Freshwater microorganisms,**

volatiles, dimethyl sulphide 968.

**Frog,**

olfactory epithelium, electro-olfactograms, alcohols, structure-activity relationships 670.

- Frogs**,  
see *Rana* spp.  
olfactory cells, electrical stimulation-effects on 1056.  
olfactory cells, odour stimuli-effects on 1057.  
oral cavities, premetamorphic papillae 1140.  
tongue, calcium receptors, protease/phospholipase/  
neuraminidase-effects on 1065.
- Frontalure**,  
*Dendroctonus frontalis*, pest control 1282.
- Fructose**,  
sweeteners 233.
- sweeteners, legislation 1618.
- taste intensities, sweetness 268.
- D-Fructose**,  
amino acids-reaction, odours profiles 1449.
- Fruit**,  
aroma compounds, wine 1554.
- Fundulus similis**,  
predatory behaviour 1321.
- Fungiform papillae**,  
man, taste buds 1096.  
mice/rats, tongues 1141.
- Fusobacterium nucleatum**,  
leucocytes (neutrophilic)-guinea-pigs, chemotaxis 1181.
- GABA**,  
gecko, olfactory bulbs 11.  
guinea pigs, olfactory cortex, AMP (cyclic) 30.
- Galactose-binding protein**,  
*Escherichia coli*, chemotaxis 55.
- Galactose receptors**,  
*Escherichia coli*, chemotaxis 1207.  
*Salmonella typhimurium*, chemotaxis 747.
- Galago crassicaudatus**,  
chest glands secretions 941.
- Garlic**,  
flavour compounds, L-5-alk(en)ylthiomethylhydantoin-( $\pm$ )-S-  
oxide 956.  
processing, deodorization, ozone-effects on 983.
- Gastrophysa atrocyanea**,  
defence secretions, chrysomelidial 850.
- Gecko**,  
olfactory bulbs, GABA/bicuculline/carnosine-effects on 11.
- Gelis tenellus**,  
oviposition, host selection, kairomones 1240.
- Genetics**,  
apples 992.  
*Drosophila melanogaster*, avoidance learning 847.  
*Drosophila melanogaster*-mutants, quinine-effects on 799.
- Escherichia coli*, chemotaxis 57.  
*Escherichia coli*, chemotaxis, methyl-N-methyl anthranilate-  
effects on 58.
- Escherichia coli*, chemotaxis, transduction 1209.  
*Escherichia coli*, mutants, chemotaxis 1208.
- Escherichia coli*/*Salmonella typhimurium*, chemotaxis 56.
- leukaemia cells, chemotaxis 1151.  
man, olfactory perception 1091.  
man, phenylthiocarbamide, taste perception 1097.  
mice, olfactory preferences 1339.
- mice, reproductive behaviour, histocompatibility genes-  
effects on 1331.
- mice, taste aversion learning 1369.
- Oryza sativa*, olfactory properties 1042.
- Ostrinia nubilalis*, pheromones 778.
- Rhizobium meliloti*, chemotaxis 1212.
- sweet corn, organoleptic evaluation 1019.
- Gentianae**,  
bitter principle, chromatography (liquid) 1512.
- Geographical variations**,  
*Dendroctonus pseudotsugae*, pheromones/sound production  
845.
- Geranial**,  
*Pieris melete*, pheromones 781.
- Geraniol**,  
*Pieris melete*, pheromones 781.
- Geranyl acetate**,  
*Sceliphron caementarium*, head secretions 143.
- Gerbils**,  
exploratory behaviour 175.
- marking behaviour, p-chlorophenylalanine/fenfluramine/ $\alpha$ -  
methyltyrosine-effects on 1354.
- marking behaviour, testosterone-effects on 1355.
- novelty habituation, anosmia/bulbectomy-effects on 938.
- sodium appetite, diphenylhydantoin-effects on 926.
- Germination**,  
corn chips, off flavours, bitterness 245.  
weeds, flavour compounds-effects on 296.
- Ginger**,  
pungent principles, oleoresins 1525.
- Gingerol**,  
*Zingiber officinale*, pungent principles, biosynthesis 1513.
- Gistex-X-II**,  
yeasts lysates, flavour compounds 960.
- Glossina morsitans**,  
traps baits 114.
- Glossina pallidipes**,  
traps baits 114.
- Glucose**,  
sweeteners 233.
- Glucose-binding protein**,  
*Escherichia coli*, chemotaxis 55.
- 2-deoxy-D-Glucose**,  
rats, taste preferences, taste aversion learning 906.
- Glucosinolates**,  
*Phyllotreta armoraciae*, phagostimulants 802.
- Glutamate decarboxylase**,  
mice, olfactory bulb, social environment-effects on 1117.
- Glutamic acid decarboxylase**,  
rats, olfactory tubercles, bulbectomy-effects on 1124.
- Glutamic decarboxylase**,  
rats, olfactory tubercle, bulbectomy-effects on 1127.
- Glycine max**,  
*Epilachna varivestris*, feeding behaviour, host preference 98.
- Glycoalkaloids**,  
potatoes, bitterness, quantification 1037.
- Glycyrrhiza glabra**,  
flavour compounds, chromatography (high-performance  
liquid), glycyrrhizin 952.
- Glycyrrhizin**,  
licorice, flavour compounds, chromatography (high-  
performance liquid) 952.  
rats, metabolism 1040.
- Gnathotrichus retusus**,  
aggregation behaviour, pheromones 133.

- Gnathotrichus sulcatus**,  
aggregation behaviour, pheromones 133.  
traps baits, pheromones 115.
- Goats**,  
milk, flavour compounds 991.
- Goldfish**,  
see *Carassius auratus*  
olfactory bulb/telencephalon-relationship 1108.
- Gossypium**,  
*Pectinophora gossypiella*, traps baits, pheromones 118.
- Pectinophora gossypiella*, traps baits, pheromones 1290, 1291.
- Graeffia crouani**,  
defence secretions, iridodials/nepetalactone 851.
- Grandlure**,  
*Anthonomus grandis*, traps baits 110.
- Grapefruit**,  
essential oils 215.
- Grapes skins**,  
organoleptic evaluation 295.
- Graphic linear scaling**,  
beer, stale flavours, taste panel evaluation 266.
- Grapholitha molesta**,  
pest control, pheromones, Orfralure 1285.  
reproductive behaviour, pheromones 772.  
traps baits, pheromones 1284.
- Grasshoppers**,  
attractants, phagostimulants 112.
- Grazing**,  
roe deer, olfactory perception 1436.
- Grocus bore**,  
reproductive isolation, pheromones, nerol 1239.
- Growth factors**,  
pork, organoleptic evaluation 1590.
- Guazatine triacetate**,  
antifeedants, insects 93.
- Guinea-pigs**,  
chemical communication, urine odours 888.  
eosinophil chemotactic factor, release 716.  
leucocytes (neutrophilic), chemotaxis 1175.  
leucocytes (neutrophilic), chemotaxis, *Bacteroides melaninogenicus*/*Bacteroides asaccharolyticus*/*Fusobacterium nucleatum*/*Peptococcus anaerobius*-effects on 1181.  
leucocytes (polymorphonuclear), chemotaxis, dansyl chloride-effects on 730.  
macrophages, chemotactic factors-secretion 1170.  
macrophages, chemotaxis, ageing/nutrition-effects on 720.  
macrophages, chemotaxis, cell membranes-role 1164.  
macrophages, chemotaxis, methylation 53.  
olfactory cortex, AMP (cyclic), serotonin/GABA-effects on 30.  
olfactory cortex, anaesthetics-effects on 1120.  
perineal glands, volatiles 889.  
taste preferences, imprinting 1400.  
vomeronasal organs, urine non-volatiles-effects on 1119.
- Gyrinus frosti**,  
defence secretions, seasonal variations 130.
- Haematobia irritans**,  
attractants, cattle, hormones-effects on 134.
- Haem pigments**,  
meat, off flavours, warmed-over-flavour 256.
- Haemocytes**,  
*Crassostrea virginica*, chemotaxis, bacteria-effects on 46.
- Halictus arenosus**,  
Dufour's gland secretions, macrocyclic lactones 1309.
- Halictus rubicundus**,  
Dufour's gland secretions, macrocyclic lactones 1309.
- Halobacterium halobium**,  
chemotaxis 745, 1211.
- Haloperidol**,  
man, chemoreceptors reflexes 1149.
- Ham**,  
organoleptic evaluation, curing-effects on 1029, 1592.  
taste panel evaluation, massaging-effects on 1023.  
taste panel evaluation, soya proteins-effects on 1027.
- Hamsters**,  
maternal behaviour, bulbectomy/vomeronasal nerve lesions-effects on 874.  
nucleus tractus solitarius, taste stimuli-effects on 674.  
nucleus tractus solitarius/parabrachial pons, taste stimuli-effects on, taste aversion learning-correlation 673.  
olfactory bulb, noradrenaline-content, castration-effects on 706.  
olfactory preferences, early experience, sex differences 1343.  
olfactory preferences, ontogeny 873.  
reproductive behaviour, dimethyl disulphide/dimethyl trisulphide-responses 867.  
reproductive behaviour, oestrus cycle 868.  
reproductive behaviour, vomeronasal organs-role 1332.  
sodium appetite, diphenylhydantoin-effects on 926.
- Haptotaxis**,  
leucocytes (neutrophilic)-man 724.
- Hares-snowshoe hare**,  
food selection 168.
- Harvesting**,  
wine, tannins 999.
- Head**,  
*Sceliphron caementarium*, secretions, geranyl acetate/2-decen-1-ol 143.
- Heart**,  
dogs, aortic body-effects on 1148.
- Heart rate**,  
rats, bulbectomy-effects on 1126.
- Hedonics**,  
man, fasting-effects on 686.  
man, odour intensities, odour pollution 679.  
man, odour preferences 677.  
man, odour preferences, descriptive profile/emotional profile 678.  
man, taste preferences 685, 688.  
man, taste preferences/odour preferences 689.
- Hedya nubiferana**,  
reproductive behaviour, pheromones, (E,E)-8,10-dodecadienyl acetate/(Z)-8-dodecenyl acetate 1223.
- Helichrysum**,  
essential oils 220.
- Heliopsis**,  
pest control, (Z)-9-tetradecen-1-ol formate 1287.
- Heliopsis armigera**,  
traps baits, (Z)-11-hexadecenal/(Z)-11-tetradecenal 822.



- Heliothis virescens**,  
pheromones, (Z)-11-hexadecenal/(Z)-9-tetradecenal-synthesis 179.  
reproductive behaviour, pheromones 1243.  
traps baits, pheromones 819.  
traps baits, pheromones, (Z)-11-hexadecenal/(Z)-9-tetradecenal 821.
- Heliothis zea**,  
kairomones, *Trichogramma pretiosum*, host selection 836.  
pheromones 1242.  
traps baits, pheromones 820.
- Helix lucorum**,  
feeding behaviour/avoidance behaviour, metacerebral cells 805.
- Hemileuca**,  
reproductive isolation, pheromones 1244.
- Hemileuca oliviae**,  
phagodetrants, zanthophylline 792.
- Hens**,  
trimethyl oxidase-activity, eggs, taints 243.
- Heparin**,  
man-leucocytes, chemotaxis 1167.
- Hepatic chemoreceptors**,  
osmoregulation, sodium-effects on 1069.
- Hept-cis-4-enal**,  
cod, off flavour 963.
- 1-Heptanol**,  
*Dendroctonus jeffreyi*, aggregation behaviour, pheromones 129.
- 2-Heptanol**,  
*Dendroctonus jeffreyi*, aggregation behaviour, pheromones 129.
- 4-Heptanone**,  
*Rangifer tarandus*, preorbital glands, volatiles 894.
- Herbicides**,  
*Apis*, foraging behaviour 796.  
trout, organoleptic evaluation 1565.
- (Z)-11-Hetadecenyl acetate**,  
*Mamestra brassicae*, reproductive behaviour, pheromones-synthesis 1225.
- Heteroatomic components**,  
aroma compounds 1451.
- (E,E)-10,12-Hexadecadienal**,  
*Earias insulana*, attractants, pheromones 816.  
*Earias insulana*, pheromones 771.
- (E,Z)-10,12-Hexadecadienal**,  
*Manduca sexta*, pheromones 84.
- (Z,Z)-11,13-Hexadecadienal**,  
*Amyelois transitella*, pheromones 1228.  
*Amyelois transitella*, pheromones-synthesis 1439.
- (Z)-11-Hexadecen-1-ol**,  
*Chilo partellus*, pheromones 77.
- (Z)-11-Hexadecenal**,  
*Chilo partellus*, pheromones 77.  
*Heliothis armigera*, traps baits 822.  
*Heliothis virescens*, pheromones-synthesis 179.  
*Heliothis virescens*, traps baits, pheromones 821.
- (Z)-11-Hexadecenal**,  
*Acrolepia alliella*, reproductive behaviour, pheromones 70.
- (Z)-11-Hexadecenyl acetate**,  
*Acrolepia alliella*, reproductive behaviour, pheromones 70.  
*Eurois occulta*/*Euxoa messoria*/*Scotogramma trifolii*, attractants 1443.
- Hexanal**,  
*Sarcophaga bullata*, pheromones 92.
- High fructose corn syrup**,  
ice cream, organoleptic evaluation 272.
- Hippocampus**,  
cats, olfactory stimuli-effects on 1060.  
cats, prepyriform cortex-pathway 1134.
- Hippocampus lesions**,  
rats, taste aversion learning 901.  
rats, brain, 2-deoxyglucose-uptake 1121.
- Histocompatibility genes**,  
mice, reproductive behaviour, genetics 1331.
- Holopterus chilensis**,  
reproductive behaviour 76.
- Homadaula anisocentra**,  
antennal chemoreceptors 700.
- Homarus americanus**,  
feeding behaviour, antennule lesions-effects on 806.  
leg chemoreceptors/antennule chemoreceptors 1047.  
predation, *Mytilus edulis*/*Modiolus modiolus* 1272.  
reproductive behaviour, pheromones 1256.
- Homing behaviour**,  
*Catostomus commersoni* 932.  
*Desmognathus ochrophaeus* 1338.  
*Notophthalmus viridescens*, anosmia-effects on 1425.  
pigeons 1427.  
pigeons, anosmia-effects on 1428, 1429.  
pigeons, olfactory nerve lesions-effects on 937.  
pigeons, olfactory stimuli-effects on 1430.  
*Salamandra salamandra* 1426.
- Hops**,  
aroma compounds, storage effects 199.  
bitterness, colupulone 1502.
- bitterness, ripening-effects on 210.
- Hormones**,  
cattle, *Haematobia irritans*, attractants 134.
- Horseradish peroxidase transport**,  
cats, aortic nerves, peripheral chemoreceptors 1146.
- Horses**,  
food intake, rapeseed diets-effects on 1420.  
mother-offspring interactions 881.
- Host location**,  
*Delia brassicae*, review 97.
- Megalodiscus temperatus*, chemotaxis 1221.
- Neoplectana carpocapsae*, aggregation behaviour 139.
- Host preference**,  
*Epilachna varivestris*, feeding behaviour, Glycine max 98.  
*Phyllodecta laticollis*, *Salix*/*Populus* 103.
- insects, attractants 94.
- Host searching behaviour**,  
*Aedes aegypti*, olfactometers 1035.
- Apanteles glomeratus* 125.  
*Delia brassicae* 95.  
*Delia brassicae*, oviposition 81.  
*Delia brassicae*, tarsal chemoreceptors, oviposition 3.  
*Leptinotarsa decemlineata*, antennal chemoreceptors, electroantennogram 8.
- Nereis fucata* 1323.  
*Psila rosae*, methyl eugenol-effects on 1266.
- Host selection**,  
*Aphis fabae*, plant extracts-effects on 793.  
*Gelis tenellus*, oviposition, kairomones 1240.  
insects, review 1259.  
*Lycaena dorcas*/*Lycaena helloides*, oviposition 1248.  
*Psithyrus* 1317.

**Host selection,(continued)**

*Trichogramma pretiosum*, *Heliothis zea-kairomones*, role 836.

**Host volatiles,**

*Ips pini*, olfactory cells 5.

**Housing,**

pigs, deodorization 1531.

**Huddling,**

rats, ontogeny 149.

**Humans,**

see **Man**

**Hyaenidae,**

olfactory perception 173.

**Hyalophora cecropia,**

reproductive behaviour, pheromones 773.

**Hydrochlorothiazide,**

rats, taste aversion learning 908.

**Hydrogen sulphide,**

kamaboko, off flavours, temperature effects 259.

**Hydrophobicity,**

lipids/carbohydrates, bitterness, structure-activity relationships 975.

**3-Hydroxy- $\beta$ -damascone,**

synthesis 1490.

**4-Hydroxy-2-ethyl-5-methyl-3(2H)-furanone,**

soya sauce, flavour compounds 1468.

**1-Hydroxy-7-methyl-3-octanone,**

*Rangifer tarandus*, interdigital glands secretions, volatiles 177.

**11-Hydroxycorticosterone activity,**

rats, bulbectomy-effects on 1123.

**3-Hydroxydihydro- $\beta$ -damascone,**

synthesis 1490.

**Hylemya,**

oviposition, pheromones 774.

**Hymenocallis littoralis,**

alkaloids, *Schistocerca gregaria*, feeding deterrents 1267.

**Hymenoptera,**

Dufour's gland/mandibular glands/labial glands secretions, volatiles 852.

**Hypera postica,**

attractants, *Medicago sativa*, volatiles 1262.

phagodeterrents, zanthophylline 792.

**Hypersensitivity,**

perfumery 978.

**Hyphantria cunea,**

pheromones, n-tetradecane/1-tetradecanol, metamorphosis-effects on 82.

**Hypoglycemia,**

*Chrysomys d'orbigni*, bulbectomy-effects on 1113.

**Hyposmia,**

man, olfactometers 1089.

man, olfactory thresholds, pyridine scale technique 1090.

**Hypothalamus,**

taste preferences, rats, stimulation-effects on 1411.

**Hypothalamus (lateral),**

rats, taste aversion learning, ESB 909.

**Hypothalamus (lateral) lesions,**

rats, feeding behaviour/drinking behaviour 923.

rats, recovery of function, feeding behaviour/drinking behaviour, bulbectomy-effects on 1405.

**Hypothalamus (ventromedial) lesions,**

rats, feeding behaviour 1404.

rats, food intake/taste aversion learning 164.

**Hypoxia,**

dogs, carotid reflex 42.

**Ice cream,**

organoleptic evaluation, high fructose corn syrup-effects on 272.

organoleptic evaluation, lactose-effects on 1576.  
sweeteners 1540.

**Ictalurus,**

taste buds, regeneration 35.

**Ictalurus nebulosus,**

barbels, amino acids receptors 1064.

social behaviour 1347.

**Ictalurus punctatus,**

taste cells, L-alanine-effects on 34.

**Immunoglobulin A paraproteins,**

leucocytes (eosinophilic)-man, chemotaxis 718.

**Immunoglobulin G,**

rabbits, chemotactic factors 45.

**Impala,**

social behaviour/territorial behaviour/reproductive behaviour 896.

**Imprinting,**

guinea pigs, taste preferences 1400.

mice, olfactory preferences 1339.

**Inflammation,**

leucocytes, chemotaxis/chemokinesis, review 1165.

leucocytes (polymorphonuclear)-rats, chemotaxis inhibition-relationship 727.

leucocytes (polymorphonuclear)-rats, chemotaxis 1193.

man, chemotactic factors-effects on 1157.

**Inflammation exudates,**

leucocytes, chemotaxis 1166.

**Influenza A virus,**

leucocytes (polymorphonuclear)-man, chemotaxis 1100.

**Insecta,**

electrophysiological recording, methodology 666.

feeding behaviour, plants 1260.

pheromones, pest control, models 1276.

traps baits, anisyl acetone/eugenol 1286.

antifeedants, guazatine triacetate 93.

electroantennograms 287.

host preferences, attractants 94.

host selection, review 1259.

olfactometers, electroantennograms 1598.

olfactory perception, mechanism 1.

pest control, pheromones 1275.

pheromones, synthesis 179.

pheromones receptors 758.

**Insulin,**

rats, taste preferences, taste aversion learning 906.

rats, food intake 924.

**Interdigital glands secretions,**

*Rangifer tarandus*, seasonal variations 1434.

*Rangifer tarandus*, volatiles, 1-hydroxy-7-methyl-3-octanone/  
7-methyl-1-octen-3-one 177.

**Interspecific,**

*Peromyscus maniculatus*/*Dipodomys agilis*/*Dipodomys merriami*/*Perognathus fallax*, conspecific odours-effects on 1350.

**Interspecific hybridization,**

*Ramosia rileyana*, *Synanthedon pictipes*, pheromones 1251.

**Invertebrates,**

food preferences 791.

taste perception, review 1423.

**Iodophors,**

oysters, off odours 1566.

**Ips,**

reproductive behaviour, pheromones 1245.

**Ips cembrae,**

pheromones-production, myrcene-effects on 853.

**Ips paraconfusus,**

pheromones, biosynthesis 1246.

pheromones, *Dendroctonus brevicomis*-inhibition 1307.

**Ips pini,**

antennal chemoreceptors, electroantennogram, pheromones 6.

olfactory cells, pheromones/host volatiles-effects on 5.

**Ips typographus,**

aggregation, pheromones 854.

pheromones receptors, electroantennogram 4.

traps baits, cis-verbenol/methylbutenol 823.

**Iridodials,**

*Graeffea crouani*, defence secretions 851.

**Iridomyrmex humilis,**

food selection, *Vicia* 800.

**Iron deficiency,**

rats, taste aversion learning 1391.

**Isobutyraldoxime O-methyl ether,**

chickens, volatiles, off odours 195.

**Isobutyronitrile,**

chickens, volatiles, off odours 195.

**Isohumulones,**

beer, off flavours, degradation 263.

(+)-cis-2-Isopropenyl-1-methylcyclobutaneethanol,

*Anthonomus grandis*, pheromones 1230.

**Isopropyl carboxylates,**

*Dermestes maculatus*, pheromones 846.

**(Z)-Jasmone,**

synthesis 1493.

**Juniperus deppeana,**

essential oils, volatiles 1522.

**Juniperus dopeana,**

*Odocoileus hemionus*, food preferences 1419.

**Juniperus macropoda,**

essential oils 221.

**Juniperus osteosperma,**

essential oils, volatiles 1522.

*Odocoileus hemionus*, food preferences 1419.

**Juniperus scopulorum,**

essential oils, volatiles 1522.

*Odocoileus hemionus*, food preferences 1419.

**Kairomones,**

*Gelis tenellus*, oviposition, host selection 1240.

*Heliothis zea*, *Trichogramma pretiosum*, host selection 836.

*Microplitis croceipes*, diets-effects on 101.

**Kamaboko,**

off flavours, hydrogen sulphide, temperature effects 259.

**Keiferia lycopersicella,**

reproductive behaviour, pheromones 1247.

traps baits, pheromones 808.

**Koji,**

rice, volatiles 187.

**Krill,**

*Euphausia superba*, aroma compounds, off odour 1470.

**Kveim antigen,**

monocytes-man, chemotaxis, sarcoidosis 721.

**Labellar chemoreceptors,**

*Phormia regina*, electrical properties, age-effects on 701.

**Labial gland secretions,**

*Bombus*, pheromones 74.

**Labial glands,**

Hymenoptera, secretions, volatiles 852.

**Labiatae,**

flavour compounds 981.

**Labium chemoreceptors,**

*Lygus lineolaris* 1139.

**Lactic acid bacteria,**

cassava 1541.

milk/cheese, flavour compounds 990.

**Lactic acid derivatives,**

*Aedes aegypti*, repellents 1277.

**Lactones,**

soybean proteins hydrolysates, volatiles 961.

 **$\gamma$ -Lactones,**

*Pityrosporum*, volatiles 969.

**Lactose,**

ice cream, organoleptic evaluation 1576.

**Lactulose,**

taste intensities, sweetness 19.

**Lagoons,**

odour pollution 229.

**Lamb,**

organoleptic evaluation, breeds-effects on 1028.

**Lambdina fiscellaria,**

traps baits, pheromones 825.

**Larvae production,**

*Tisbe*, crowding-effects on 790.

**Larviposition,**

*Myzus persicae*, repellents, structure-activity relationships 137.

**Lasioderma serricorne,**

pheromones, 4,6-dimethyl-7-hydroxy-nonan-3-one 775.

**Lasiorhinus latifrons,**

mammals 878.

**Laspeyresia pomonella,**

traps baits, pheromones 108.

**Latent learning,**

rats 1385.

**Lateral olfactory tract,**

cats, amygdala, stimulation-effects on 1059.

**Lateral olfactory tract lesions,**

rats, olfactory discrimination 1393.

**Lavandin,**

essential oils, aroma compounds, quantification 1038.

**Lavender,**

essential oils, aroma compounds, quantification 1038.

**Lead,**

rats, taste aversion learning 1376.



**Learning,**

*Pterostichus melanarius*, memory 142.  
rats, avoidance behaviour 176.

rats, food preferences, mother-offspring interactions/social interactions 876.

taste preferences/odour preferences, evolution-role 897.

**Leg chemoreceptors,**

*Homarus americanus* 1047.

**Legislation,**

food, aroma compounds, Hungary 1621.

fragrances, toxicity 976, 977.

meat, flavour compounds 1619.

nutritive sweeteners 234.

perfumery, toxicity, paracresol 1617.

sugar factory, odour pollution 232.

sweeteners, fructose/sorbitol/mannitol/xylitol 1618.

**Legumes,**

off flavours, lipoxygenase-effects on 248.

**Lemon,**

essential oils, benzyl alcohol-quantification 1610.

essential oils, citral-quantification 1611.

flavourings, citral, instability 953.

**Lentils flour,**

bread 1579.

**Leperisinus californicus,**

aggregation, pheromones 1311.

**Lepidoptera,**

attractants 824.

attractants, maize, volatiles 1310.

pheromones, olefins-synthesis 1444.

traps baits, pheromones 825.

**Leptinotarsa decemlineata,**

antennal chemoreceptors, electroantennogram, host searching behaviour 8.

antennal chemoreceptors, olfactory perception 7.

*Solanum tuberosum*, volatiles, responses 204.

**Leptoglossus,**

abdominal gland secretions, volatiles 83.

**Leptothorax,**

recruitment, pheromones 135.

**Lepus americanus,**

food selection 168.

**Lespedeza cuneata,**

*Eurema hecabe*, phagostimulants 99.

**Leucocytes,**

chemotaxis, inflammation exudates 1166.

chemotaxis, mathematical models 1201.

chemotaxis/chemokinesis, inflammation, review 1165.

man, chemotaxis, heparin-effects on 1167.

man, chemotaxis, tetracyclines-effects on 719.

mice, chemotaxis, *Schistosoma mansoni*-effects on 1180.

**Leucocytes (eosinophilic),**

man, chemotactic factors receptors 1161.

man, chemotaxis, immunoglobulin A paraproteins-effects on 718.

man, chemotaxis, mono-hydroxy-eicosatetraenoic acids-effects on 1160.

man, chemotaxis, serum enhancing factor 717.

**Leucocytes (granulocytic),**

man, chemotaxis, *Escherichia coli*/*Staphylococcus aureus*-chemotactic factors 1163.

man, chemotaxis, storage effects, ATP-role 1162.

**Leucocytes (neutrophilic),**

chemotactic factors-interaction, review 1178.

chemotactic factors receptors 1179.

chemotaxis, ascorbic acid-effects on 1176.

chemotaxis, casein-effects on 1177.

chemotaxis, *Cryptococcus neoformans*-effects on 722.

chemotaxis, quantification 290.

guinea-pigs, chemotaxis, *Bacteroides melaninogenicus*/

*Bacteroides asaccharolyticus*/*Fusobacterium nucleatum*/

*Peptococcus anaerobius*-effects 1181.

man, AMP (cyclic), chemotactic factors-effects on 1190.

man, chemotactic defects, burns 1087.

man, chemotactic factors, N-formyl-L-methionyl-L-phenylalanine-adherence 1189.

man, chemotactic factors receptors 723.

man, chemotaxis, AMP (cyclic)-effects on 49.

man, chemotaxis, antiinflammatory drugs-effects on 48.

man, chemotaxis, arachidonic acid derivatives-effects on 1186.

man, chemotaxis, bacteria infection-effects on 1085.

man, chemotaxis, beta adrenergic blocking agents-effects on 725.

man, chemotaxis, cystic fibrosis-effects on 695.

man, chemotaxis, leukaemia 1098.

man, chemotaxis, monohydroxy-eicosatetraenoic acids-effects on 1188.

man, chemotaxis, psoriasis 692.

man, chemotaxis, regulation, review 1184.

man, chemotaxis, *Staphylococcus aureus* furunculosis-effects on 1185.

man, chemotaxis, storage effects 1187.

man, chemotaxis/haptotaxis 724.

man/rabbits/guinea-pigs/pigs, chemotaxis 1175.

rabbits, chemotactic factors, response 1183.

rabbits, chemotactic factors receptors 1182.

rabbits, chemotaxis, AMP (cyclic)-contents 1202.

**Leucocytes (phagocytic),**

chemotaxis, review 1203.

**Leucocytes (polymorphonuclear),**

chemotaxis, *Bacteroides fragilis*-effects on 1191.

chemotaxis/chemokinesis 1192.

guinea-pigs, chemotaxis, dansyl chloride-effects on 730.

man, chemotactic factor, peptide synthesis 737.

man, chemotactic factors, fluorescent probes 1199.

man, chemotaxis, adherence 734.

man, chemotaxis, arachidonic acid-effects on 51.

man, chemotaxis, bacteria infection-effects on 1197.

man, chemotaxis, cigarette smoking-effects on 738.

man, chemotaxis, cooperation 732.

man, chemotaxis, endotoxins-effects on 50.

man, chemotaxis, influenza A virus-effects on 1100.

man, chemotaxis, microtubules, ascorbic acid-effects on 729.

man, chemotaxis, microtubules-role 733.

man, chemotaxis, periodontitis-effects on 1099.

man, chemotaxis, sepsis 25.

man, chemotaxis, *Staphylococcus aureus*, chemotactic

**Leucocytes (polymorphonuclear),(continued)**

factors 1158.  
 man, eosinophil chemotactic factor-release, phospholipase A2/arachidonic acid-role 1198.  
 man, neonates, chemotaxis 736.  
 Propionibacterium acnes-chemotactic factors 1195.  
 rabbits, chemotactic factors, structure-activity relationships 1194.  
 rabbits, chemotaxis, Bacteroides fragilis-lipopolysaccharides, antibodies-effects on 731.  
 rats, chemotaxis, benoxapofen-effects on 728.  
 rats, chemotaxis, cholera toxin-effects on 52.

rats, chemotaxis, inflammation 1193.  
 rats, chemotaxis inhibition, inflammation-relationship 727.

**Leukaemia,**  
 man, leucocytes (neutrophilic), chemotaxis 1098.

**Leukaemia cells,**  
 chemotaxis, genetics 1151.

**Leukocytes (polymorphonuclear),**  
 man, chemotaxis, leukotriene B-effects on 1200.

**Leukotriene B,**  
 leukocytes (polymorphonuclear)-man, chemotaxis 1200.

**Licorice,**  
 flavour compounds, chromatography (high-performance liquid), glycyrrhizin 952.

**Ligia exodica,**  
 deutocerebrum 702.

**Ligusticum thomsonii,**  
 essential oils 222.

**Linacidea aenea,**  
 defence secretions 1312.

**Linalool,**  
 Dysdercus intermedius, scent gland 206.

**Lineatin,**  
 Trypodendron lineatum, pest control, pheromones 1288.

**Lipids,**  
 bitterness, structure-activity relationships, hydrophobicity 975.

**Lipoxygenase,**  
 legumes, off flavours 248.

rice, off flavour 1558.

**Listeria monocytogenes,**  
 chemotactic factors, macrophages, rats, chemotaxis 1171.

**Lithium,**  
 mice, taste aversion learning 154.

rats, drinking behaviour 1401.

rats, taste aversion learning 1374.

rats, taste aversion learning/odour aversion learning, UCS 1388.

**Livestock housing,**  
 deodorization 1532.

**Locusta migratoria,**  
 feeding, Acacia amino acids-effects on 1261.

maxillary palp chemoreceptors, feeding behaviour 12.

**Luehdorfia japonica,**  
 defence secretions, myrcene 839.

**Luehdorfia puziloi,**  
 defence secretions, myrcene 839.

**Lumbricus terrestris,**  
 coelomocytes, chemotaxis 43.

**Lycaena dorcax,**  
 oviposition, host selection 1248.

**Lycaena helloides,**  
 oviposition, host selection 1248.

**Lygaeus kalmii,**  
 aggregation behaviour, pheromones 1314.

**Lygus lineolaris,**  
 labium chemoreceptors 1139.  
 rostral chemoreceptors, feeding behaviour 13.

**Lymantria dispar,**  
 attractants, disparlure 1289.  
 pest control, pheromones, disparlure 826.  
 traps baits, disparlure, plastic dispensers 116.

**Lymphocytes,**  
 man, chemotaxis, Fc receptors, relationship 714.  
 man, chemotaxis/chemokinesis, assays 1168.

**Lymphocytes (neutrophilic),**  
 man, chemotactic defects 1086.

**Macaca spp.,**

see **Monkeys**

**Macrocytic lactones,**  
 Halictus arenosus/Halictus rubicundus, Dufour's gland secretions 1309.

**Macrophages,**  
 guinea-pigs, chemotactic factors-secretion 1170.  
 guinea-pigs, chemotaxis, ageing/nutrition-effects on 720.  
 guinea-pigs, chemotaxis, cell membranes-role 1164.

guinea-pigs, chemotaxis, methylation 53.

man, chemotactic factors, release 1159.

mice, chemotaxis, assays 1601.

mice, chemotaxis, tetracyclines-effects on 1169.

rats, chemotaxis, Listeria monocytogenes, chemotactic factors 1171.

**Macropodus opercularis,**  
 reproductive behaviour 1326.

**Maize,**  
 off flavours, bitterness, germination-effects on 245.  
 off flavours, peroxidase-relationship 249.

volatiles, Lepidoptera, attractants 1310.

**Malacosoma americanum,**  
 antennal chemoreceptors, plants volatiles-effects on 1046.  
 trail following behaviour 801.

**Malacosoma disstria,**  
 trail following behaviour 855.

**Malolactic fermentation,**  
 wine, aroma compounds 965.

**Malt,**  
 beer, aroma compounds 200.

**Maltol,**  
 strawberries, flavourings, quantification 1606.

**Maltose-binding protein,**  
 Escherichia coli, chemotaxis 55.

**Mamestra brassicae,**  
 pheromones, Z-11-hexadecenyl acetate/E-11-hexadecenyl acetate/Z-11-hexadecenol/Z-9-tetradecenyl acetate 1249.  
 reproductive behaviour, pheromones, (Z)-11-hexadecenyl acetate/(Z)-11-hetadecenyl acetate-synthesis 1225.

**Mamestra configurata,**  
 traps baits, pheromones 827.

**Mammals,**  
 chemical communication, reviewchemical communication, mammals, review 1346.

Lasiorninus latifrons 878.

**Mammals, (continued)**

population regulation, chemical communication-effects on 882.

reproductive behaviour, olfactory stimuli, review 67.

**Man,**

chemoreceptors reflexes, haloperidol-effects on 1149.

chemotactic defects, systemic lupus erythematosus 1088.

chemotactic factor inactivator, isolation 44.

chemotactic factors, complement deficiency 1101.

chemotactic factors, serum, isolation/characterization 1152.

fungiform papillae, taste buds 1096.

hedonics, fasting-effects on 686.

hedonics, odour intensities, odour pollution 679.

hedonics, odour preferences 677.

hedonics, odour preferences, descriptive profile/emotional profile 678.

hedonics, taste preferences 685, 688.

hedonics, taste preferences/odour preferences 689.

hyposmia, olfactometers 1089.

inflammation, chemotactic factors-effects on 1157.

leucocytes, chemotaxis, heparin-effects on 1167.

leucocytes, chemotaxis, tetracyclines-effects on 719.

leucocytes (eosinophilic), chemotactic factors receptors 1161.

leucocytes (eosinophilic), chemotaxis, immunoglobulin A paraproteins-effects on 718.

leucocytes (eosinophilic), chemotaxis, mono-hydroxy-eicosatetraenoic acids-effects on 1160.

leucocytes (eosinophilic), chemotaxis, serum enhancing factor 717.

leucocytes (granulocytic), chemotaxis, *Escherichia coli*/ *Staphylococcus aureus*-chemotactic factors 1163.

leucocytes (granulocytic), chemotaxis, storage effects, A1P-role 1162.

leucocytes (neutrophilic), AMP (cyclic), chemotactic factors-effects on 1190.

leucocytes (neutrophilic), chemotactic defects, burns 1087.

leucocytes (neutrophilic), chemotactic factors receptors 723.

leucocytes (neutrophilic), chemotactic factors, N-formyl-L-methionyl-L-phenylalanine-adherence 1189.

leucocytes (neutrophilic), chemotaxis 1175.

leucocytes (neutrophilic), chemotaxis, AMP (cyclic)-effects on 49.

leucocytes (neutrophilic), chemotaxis, antiinflammatory drugs-effects on 48.

leucocytes (neutrophilic), chemotaxis, arachidonic acid derivatives-effects on 1186.

leucocytes (neutrophilic), chemotaxis, bacteria infection-effects on 1085.

leucocytes (neutrophilic), chemotaxis, beta adrenergic blocking agents-effects on 725.

leucocytes (neutrophilic), chemotaxis, leukaemia 1098.

leucocytes (neutrophilic), chemotaxis, monohydroxy-eicosatetraenoic acids-effects on 1188.

leucocytes (neutrophilic), chemotaxis, psoriasis 692.

leucocytes (neutrophilic), chemotaxis, *Staphylococcus aureus* furunculosis-effects on 1185.

leucocytes (neutrophilic), chemotaxis, storage effects 1187.

leucocytes (neutrophilic), chemotaxis/haptotaxis 724.

leucocytes (neutrophilic)/leucocytes (eosinophilic), chemotaxis, regulation, review 1184.

leucocytes (neutrophilic)/monocytes, chemotaxis, cystic fibrosis-effects on 695.

leucocytes (polymorphonuclear), chemotactic factor, peptide synthesis 737.

leucocytes (polymorphonuclear), chemotactic factors, fluorescent probes 1199.

leucocytes (polymorphonuclear), chemotaxis, sepsis 25.

leucocytes (polymorphonuclear), chemotaxis, endotoxins-effects on 50.

leucocytes (polymorphonuclear), chemotaxis, arachidonic acid-effects on 51.

leucocytes (polymorphonuclear), chemotaxis, microtubules, ascorbic acid-effects on 729.

leucocytes (polymorphonuclear), chemotaxis, cooperation 732.

leucocytes (polymorphonuclear), chemotaxis, microtubules-role 733.

leucocytes (polymorphonuclear), chemotaxis, adherence 734.

leucocytes (polymorphonuclear), chemotaxis, cigarette smoking-effects on 738.

leucocytes (polymorphonuclear), chemotaxis, periodontitis-effects on 1099.

leucocytes (polymorphonuclear), chemotaxis, influenza A virus-effects on 1100.

leucocytes (polymorphonuclear), chemotaxis,

*Staphylococcus aureus*, chemotactic factors 1158.

leucocytes (polymorphonuclear), chemotaxis, serum-effects on 1196.

leucocytes (polymorphonuclear), chemotaxis, bacteria infection-effects on 1197.

leucocytes (polymorphonuclear), eosinophil chemotactic factor-release, phospholipase A2/arachidonic acid-role 1198.

leucocytes (polymorphonuclear), neonates, chemotaxis 736.

leukocytes (polymorphonuclear), chemotaxis, leukotriene B-effects on 1200.

lymphocytes, chemotaxis, Fc receptors, relationship 714.

lymphocytes, chemotaxis/chemokinesis, assays 1168.

lymphocytes (neutrophilic), chemotactic defects 1086.

macrophages, chemotactic factors, release 1159.

monocytes, chemotactic factors, biosynthesis 1156.

monocytes, chemotaxis, acute lymphoblastic leukaemia 1084.

monocytes, chemotaxis, assays 1600.

monocytes, chemotaxis, cell membranes-role 1164.

monocytes, chemotaxis, Kveim antigen-effects on, sarcoidosis 721.

monocytes, chemotaxis, prednisolone-effects on 1174.

monocytes, complement C3b receptors 1172.

mouth odours, chromatography (gas), bacteria-effects on 1102.

neonates, sucking behaviour 172.

odour preferences, odour pollution-effects on 676.

olfactometers, book 1093.

olfactometers, EEG 1094.

olfactory mucosa, neuroblastoma 21.

olfactory organs, tumours 1092.

olfactory perception, genetics 1091.

olfactory preferences, perfumery, complexity-relationship 1073.

olfactory thresholds, hyposmia, pyridine scale technique 1090.

phenylthiocarbamide, taste perception, genetics 1097.

promyelocytic leukaemia cells, chemotactic factors receptors 715.



**Man,(continued)**

*Propionibacterium acnes*/*Propionibacterium granulosum*/*Staphylococcus epidermidis*, chemotactic factors, skin diseases 1153.

saliva flow, olfactory perception-effects on 22.

saltiness, taste thresholds, adaptations, review 1083.

saltiness/sweetness, taste intensity 1080.

sodium salts, taste quality 1081.

taste, terminology 1078.

taste buds, anatomy 1095.

taste disorders, captopril-effects on 691.

taste disorders/olfactory disorders-relationship-odour preferences/taste preferences 693.

taste papillae, taste perception, sourness, cross-enhancement 16.

taste perception, bitterness, saccharin/propylthiouracil 694.

taste perception, bitterness-sweetness-mixtures 15.

taste perception mechanisms, taste intensities, sweetness 1082.

taste preferences, food selection 684.

taste preferences/odour preferences, multidimensional scaling 680.

taste sensitivity/olfactory sensitivity, circadian rhythms 1074.

taste thresholds, amino acids, age-effects on 1076.

taste thresholds, saltiness, age-effects on 690.

taste thresholds, sweetness, dental caries-relationship 23.

taste thresholds, sweetness/bitterness, saliva content-effects on 683.

taste thresholds, temperature effects 1079.

taste thresholds, viscosity-effects on 1077.

tobacco smoking, taste test 24.

visual communication, taste stimuli/olfactory stimuli-effects on 931.

**Mandibular gland,**

*Melissodes desponsa*/*Melissodes denticulata*, secretions 857.

Hymenoptera, secretions, volatiles 852.

**Mandibular glands secretions,**

*Calomyrmex*, volatiles 843.

**Manduca sexta,**

aversion learning 100.

pheromones, (E,Z)-10,12-hexadecadienal 84.

**Mannitol,**

sweeteners, legislation 1618.

**Manure,**

cattle, deodorization 1528.

pigs, deodorization 1529, 1530.

pigs, volatiles, fatty acids 989.

**Marketing,**

tomatoes/peppers, organoleptic evaluation 1016.

**Marking behaviour,**

*Alpinobombus*, pheromones 840.

beaver 891.

*Canis latrans* 1359.

*Capreolus capreolus* 1363.

Carnivora, evolution 1358.

*Castor canadensis* 1356, 1357.

*Clethrionomys glareolus* 1349.

*Crociodura russula* 1348.

*Dicotyles tajacu*, preorbital gland 152.  
dogs 151.

foxes 1361.

foxes, conspecifics odours-effects on 892.

gerbils, p-chlorophenylalanine/fenfluramine/ $\alpha$ -methyltyrosine-effects on 1354.

gerbils, testosterone-effects on 1355.

*Microtus xanthognathus* 884.

*Otocyon megalotis* 1360.

rats, reproductive behaviour-relationship 869.

rats, reproductive behaviour-sexual behaviour 870.

*Saimiri sciureus* 1365.

*Sanguinus fuscicollis*, secretions, volatiles 946.

*Ursus arctos* 880.

*Vulpes vulpes* 893.

**Marmota monax**,  
food selection 1416.

**Massaging,**

ham, taste panel evaluation 1023.

**Mate selection,**

*Nauphoeta cinerea*, reproductive behaviour 777.

**Maternal behaviour,**

hamsters, bulbectomy/vomeronasal nerve lesions-effects on 874.

mice 1340.

rats 877

rats, anosmia-effects on 875.

rats, pheromones, bile 1345.

sheep 1135.

**Mathematical models,**

chemoreception 1050.

leucocytes, chemotaxis 1201.

taste preferences, multidimensional scaling 687.

**Mating types,**

*Saccharomyces cerevisiae*, pheromones 1625.

**Matricaria chamomilla,**

essential oils 1523.

**Maxillary palp chemoreceptors,**

*Locusta migratoria*/*Schistocerca gregaria*, feeding behaviour 12.

**Maze equipment,**

*Coelotes terrestris*, reproductive behaviour 1031.

*Stegodyphus sarasinorum*, social behaviour 1031.

**Maze learning,**

*Drosophila melanogaster*, conspecifics odours-effects on 848.

rats, olfactory stimuli 162.

**Meat,**

aroma compounds 1475.

flavour compounds, carbonyl compounds 1473.

flavour compounds, legislation 1619.

flavour compounds, sulphur compounds 1474.

off flavours, warmed-over-flavour, haeme pigments-effects on 256.

off odour, *Pseudomonas fluorescens*-effects on 1570.

**Meat products,**

organoleptic evaluation, *Paecilomyces varioti*-effects on 1546.

**Medicago sativa,**

*Phytophthora megasperma*-zoospores, chemotaxis 63.

volatiles, *Hypera postica*, attractants 1262.

- Medullary chemoreceptors**,  
cats, respiration, temperature effects 40.
- Megalodiscus temperatus**,  
chemotaxis, host location 1221.
- Megaponera foetens**,  
predation, chemical communication 1263.  
trail following behaviour 136.
- Megaselia scalaris**,  
running, chemoreception behaviour 856.
- Melanoplus sanguinipes**,  
phagodeterrents, zanthophylline 792.
- Melia azadirachta extracts**,  
Spodoptera litura, oviposition, repellents 1295.
- Melipona quadrifasciata**,  
caste determination, 9-oxo-decanoic acid-effects on 1313.
- Melissodes denticulata**,  
Dufour's gland/mandibular gland secretions 857.
- Melissodes desponsa**,  
Dufour's gland/mandibular gland secretions 857.
- Melongena corona**,  
predatory behaviour 1321.
- Membrane potential**,  
Physarum polycephalum, chemotaxis 1219.  
Physarum polycephalum/Tetrahymena, chemotaxis 1220.  
Rhodospseudomonas spheroides, chemotaxis 1214.  
Tetrahymena pyriformis, chemotaxis 1222.
- Memory**,  
Dicrostonyx groenlandicus, olfactory stimuli 1328.
- Pterostichus melanarius**, learning 142.
- rats, taste aversion learning, ouabain-effects on 905.
- Meriones unguiculatus**,  
see **Gerbils**
- Mesuiol**,  
wine 1552.
- Metacerebral cells**,  
Helix lucorum, feeding behaviour/avoidance behaviour 805.
- Metals citrate complex**,  
Salmonella typhimurium/Escherichia coli, chemotaxis 748.
- Metamorphosis**,  
Hyphantria cunea, pheromones, n-tetradecane/1-tetradecanol 82.
- Metaseiulus occidentalis**,  
reproductive behaviour, pheromones 1250.
- Methacrylaldoxime O-methyl ether**,  
chickens, volatiles, off odours 195.
- Methacrylonitrile**,  
chickens, volatiles, off odours 195.
- Methyl (E)-6-nonenoate**,  
Ceratitidis capitata, attractants 811.
- Methyl cinnamate**,  
strawberries, flavourings, quantification 1606.
- 11-Methyl-cis-9,12-tridecadienyl acetate**,  
Adoxophyes, pheromones 1438.
- Methyl eugenol**,  
Psila rosae, host searching behaviour 1266.
- Methyl jasmonate**,  
synthesis 1493.
- Methyl oleate**,  
raisins, off flavours 250.
- 7-Methyl-1-octen-3-one**,  
Rangifer tarandus, interdigital glands secretions, volatiles 177.
- (+)-(3R,4R)-4-Methyl-3-heptanol**,  
Scolytus multistriatus, pheromones, synthesis 1447.
- 7-Methyl-3-methylene-7-octen-1-yl propanoate**,  
Quadraspidiotus perniciosus, pheromones, synthesis 1446.
- 2-Methyl-4-heptanone**,  
Rangifer tarandus, preorbital glands, volatiles 894.
- (3Z,6R)-3-Methyl-6-isopropenyl-3,9-decadien-1-yl**,  
Anidiella aurantii, attractants 810.
- Methylation**,  
Escherichia coli, chemotaxis 744, 1210.
- macrophages-guinea-pigs, chemotaxis 53.
- Methylbutenol**,  
Ips typographus, traps baits 823.
- 3-Methylcyclohex-2-en-1-one**,  
Dendroctonus pseudotsugae, attractants 1283.
- 10-Methyldodecyl acetate**,  
Adoxophyes, pheromones-synthesis 178.
- Methyldopa**,  
rats, taste aversion learning 908.
- 2-Methylfuran**,  
coffee, off flavour, quantification 261.
- Methyl-N-methyl anthranilate**,  
Escherichia coli, chemotaxis, genetics 58.
- S-Methylthioacetate**,  
cheese, aroma compounds, Brevibacterium linens 949.
- 6-Methyltryptophan**,  
sweeteners, synthesis 1505.
- Mice**,  
aggressive behaviour, pheromones 1351.  
foraging, olfactory nerves lesions-effects on 1399.  
leucocytes, chemotaxis, Schistosoma mansoni-effects on 1180.  
macrophages, chemotaxis, assays 1601.  
macrophages, chemotaxis, tetracyclines-effects on 1169.  
maternal behaviour 1340.  
mixed leucocyte reaction, chemotactic factors 726.  
monocytes, chemotaxis, osteosarcoma-effects on 1173.
- oestrus, urine odours-effects on 148.
- olfactory bulb, deoxyglucose-uptake 1116.  
olfactory bulb, glutamate decarboxylase, social environment-effects on 1117.
- olfactory bulbs, regeneration 28.  
olfactory bulbs/olfactory epithelium, carnosine/carnosine synthetase 29.
- olfactory preferences, early experience 1341.  
olfactory preferences, imprinting/genetics 1339.  
olfactory tubercle/septum/substantia nigra, noradrenaline/dopamine, aggressive behaviour-effects on 1118.  
ovulation, pheromones-effects on 1330.  
parental behaviour, social environment 1342.  
pituitary-adrenal system, social environment-effects on 887.  
reproductive behaviour, histocompatibility genes-effects on, genetics 1331.  
reproductive behaviour, pheromones-effects on 1329.  
social behaviour, saliva odours-effects on 1352.  
social interactions 886.  
taste aversion learning, genetics 1369.
- taste aversion learning, lithium-induced 154.  
taste buds, regeneration, alkaline phosphatase 36.
- tongues, fungiform papillae 1411.  
ultrasound vocalization, urine-effects on 1353.  
urine odours-effects on 866.  
vomeronasal organs, cell 704.

- Micromphale cauvetii**,  
flavour compounds, epilentinic acid 1460.
- Micromphale foetidum**,  
flavour compounds, epilentinic acid 1460.
- Microorganisms**,  
food, aroma compounds 1537.
- Microplitis croceipes**,  
kairomones, diets-effects on 101.
- Microtubules**,  
leucocytes (polymorphonuclear)-man, chemotaxis, ascorbic acid-effects on 729.  
leucocytes (polymorphonuclear)-man, chemotaxis, role 733.
- Microtus xanthognathus**,  
marking behaviour 884.
- Microwave cooking**,  
beef, organoleptic evaluation 1025.
- Mildew**,  
wine, organoleptic evaluation 1572.
- Milk**,  
aroma compounds, review 1453.  
flavour compounds, lactic acid bacteria-effects on 990.  
goats, flavour compounds 991.
- off flavours, bacteria-effects on 244.
- off flavours, organoleptic evaluation 1555.  
off flavours, wheat diets-effects on, assays 1615.  
organoleptic evaluation, ultrahigh temperature-effects on 1012.  
ultrahigh temperature, taste panel evaluation, storage effects 1575.
- Milk products**,  
aroma compounds, review 1453.
- volatiles, quantification 183.
- Minas**,  
cheese, organoleptic evaluation, temperature-effects on 1574.
- Miso**,  
flavour compounds, bacteria-effects on 188.
- Mitral cells**,  
rats, olfactory bulb, oestrus-effects on 1334.
- Mixed leucocyte reaction**,  
mice, chemotactic factors 726.
- Mixtures**,  
bitterness-sweetness, man, taste perception 15.
- Mobility**,  
Calliphora vicina, taste perception 797.
- Models**,  
food preferences/organoleptic evaluation, multidimensional scaling 1573.  
Insecta, pheromones, pest control 1276.  
olfactory bulb, electrophysiological recording 1052.  
taste perception, rats, taste cells, sodium salts/potassium salts-effects on 1066.  
vegetables-dried, storage effects, off flavour 1561.
- Modiolus modiolus**,  
Homarus americanus-predation 1272.
- Monarda fistulosa**,  
essential oils 1524.
- Monellin**,  
Dioscoreophyllum cumminsii, reduction, enzymatic properties 1507.
- Monkeys**,  
see *Macaca spp.*  
marking behaviour 1365.  
olfactory epithelium, regeneration 1137.
- Mono-hydroxy-eicosatetraenoic acids**,  
leucocytes (eosinophilic)-man, chemotaxis 1160.
- Monoamines**,  
rats, predatory aggression, olfactory bulb 939.
- Monocytes**,  
cattle, chemotaxis, bovine diarrhoea-mucosal disease virus-effects on 47.  
man, chemotactic factors, biosynthesis 1156.  
man, chemotaxis, acute lymphoblastic leukaemia 1084.  
man, chemotaxis, assays 1600.  
man, chemotaxis, cell membranes-role 1164.  
man, chemotaxis, cystic fibrosis-effects on 695.  
man, chemotaxis, Kveim antigen-effects on, sarcoidosis 721.  
man, chemotaxis, prednisolone-effects on 1174.  
man, complement C3b receptors 1172.  
mice, chemotaxis, osteosarcoma-effects on 1173.
- Monglycerides**,  
bitterness, oats 212.
- Mono-hydroxy-eicosatetraenoic acids**,  
leucocytes (neutrophilic)-man, chemotaxis 1188.
- Monomorium pharaonis**,  
queens, reproductive behaviour, pheromones 68.
- Morphine**,  
rats, taste aversion learning, self-administration-effects on 158.
- Mother-offspring interactions**,  
horses 881.  
rats, learning, food preferences 876.  
Taurotragus oryx 879.
- Mouse**,  
see *Mice*
- Mouth odours**,  
man, chromatography (gas), bacteria-effects on 1102.
- Mucilage**,  
fish, skin, collection 1604.
- Mullet**,  
taints, oil pollution-effects on 1008.
- Multidimensional scaling**,  
food preferences/organoleptic evaluation, models 1573.  
man, taste preferences/odour preferences 680.  
taste preferences, mathematical models 687.
- Multilure**,  
Scolytus multistriatus, pheromones, responses 144.
- Mus minutoides**,  
traps baits 1397.
- Mus musculus**,  
see *Mice*
- Musca domestica**,  
pheromones, muscalure, synthesis 943.
- Muscalure**,  
Musca domestica, pheromones, synthesis 943.
- Mushrooms**,  
aroma compounds 1464.  
Naematoloma fasciculare, bitter principle 1503.
- Mussels**,  
storage effects 1548.
- Mustelidae**,  
olfactory perception 173.
- Mutants**,  
Drosophila melanogaster, quinine-effects on, genetics 799.  
Escherichia coli, chemotaxis, genetics 1208.
- Mutton**,  
off flavours, aldehyde dehydrogenase-effects on 1006.
- Mutton fat**,  
fish sausages, organoleptic evaluation 237.



- Mychothorax**,  
recruitment, pheromones 135.
- Myctophiformes**,  
olfactory epithelium 1106.
- Myeloperoxidase**,  
chemotactic factors, inactivation 1154.
- Myrcene**,  
*Ips cembrae*, pheromones-production 853.  
*Luehdorfia japonica*/*Luehdorfia puziloi*, defence secretions 839.
- Myrmeleon formicarius**,  
reproductive isolation, pheromones, nerol 1239.
- Myrmica rubra**,  
recruitment, trail following behaviour 102.
- Mytilus edulis**,  
*Homarus americanus*-predation 1272.  
storage effects 1548.
- Myzus persicae**,  
larviposition, repellents, structure-activity relationships 137.
- Naematoloma fasciculare**,  
mushrooms, bitter principle 1503.
- Naloxone**,  
rats, taste aversion learning 902.  
rats, taste aversion learning, fluid intake 1371.
- Naphthalene**,  
*Delia brassicae*, repellents 1280.
- Naringinase**,  
*Citrus natsudaikai*, bitterness, thermal stability 972.
- Nauphoeta cinerea**,  
reproductive behaviour, mate selection 777.  
reproductive behaviour, pheromones 776.
- Neivamyrmex nigrescens**,  
orientation 138.
- Nematocytes**,  
*Stichodactyla haddoni*, feeding behaviour 807.
- Neoapectana carpocapsae**,  
aggregation behaviour, host location 139.
- Neocortex ablation**,  
rats, taste aversion learning 907.
- Neocortex lesions**,  
rats, brain, 2-deoxyglucose-uptake 1121.
- Neodiprion sertifer**,  
pheromones, trans-perillenal 140.  
reproductive behaviour 768.
- Neonates**,  
man, sucking behaviour 172.
- Nepetalactone**,  
*Graeffea crouani*, defence secretions 851.
- Nepytia freemani**,  
traps baits, pheromones 825.
- Neral**,  
*Pieris melete*, pheromones 781.
- Nereis fucata**,  
host searching behaviour 1323.
- Nerita tessellata**,  
chemical perception 863.
- Nerol**,  
*Euroleon nostras*/*Grocus bore*/*Myrmeleon formicarius*,  
pheromones, reproductive isolation 1239.  
*Pieris melete*, pheromones 781.
- Nerve growth factor**,  
rats, sodium appetite 1403.
- Nesting behaviour**,  
rats, olfactory preferences 1344.
- Neuraminidase**,  
frogs, tongue, calcium receptors 1065.
- Neuroblastoma**,  
man, olfactory mucosa 21.
- Nilaparvata lugens**,  
feeding behaviour, deterrents, *Oryza* 1264.
- Noradrenaline**,  
mice, olfactory tubercle/septum/substantia nigra, aggressive  
behaviour-effects on 1118.  
rats/hamsters, olfactory bulb, castration-effects on 706.
- dogs, carotid bodies 41.
- Norpatchoulenol**,  
synthesis 1494.
- Notophthalmus viridescens**,  
homing behaviour, anosmia-effects on 1425.  
palatability, chickens 1396.
- Novelty**,  
rats, taste aversion learning 1375.
- Novelty habituation**,  
gerbils, anosmia/bulbectomy-effects on 938.
- Nucleus accumbens lesions**,  
rats, avoidance learning 904.
- Nucleus tractus solitarius**,  
hamsters, taste stimuli-effects on 674.  
hamsters, taste stimuli-effects on, taste aversion learning-  
correlation 673.
- Nursing behaviour**,  
*Formica rufa*, pheromones-effects on 1308.
- Nutmeg**,  
essential oils 215.
- Nutrient enrichment**,  
beans, taste panel evaluation 1017.
- Nutrition**,  
macrophages-guinea-pigs, chemotaxis 720.
- Nutritive sweeteners**,  
review 234.
- Oats**,  
monoglycerides, bitterness 212.
- 3,13-Octadecadien-1-ol acetates**,  
*Sesiidae*, attractants, synthesis 944.
- (Z)-13-Octadecenal**,  
*Chilo suppressalis*, pheromones-synthesis 1442.
- Octa-1,5-Dien-3-Ol**,  
*Basidiomycetes*, volatiles, *Tyrophagus putrescentiae*,  
attractants 1320.
- Odocoileus hemionus**,  
food preferences, *Juniperus doopeana*/*Juniperus*  
*osteosperma*/*Juniperus scopulorum* 1419.  
food selection, essential oils-effects on 171.
- Odour aversion learning**,  
*Ambystoma tigrinum*, avoidance behaviour, amyl acetate/  
camphor 1366.  
rats 1383.  
rats, UCS-lithium 1388.
- Odour control**  
1534.  
animal housing 231.  
animal housing, odour pollution 230.  
pigs manure 986.  
wastewater treatment, *Aspergillus foetidus* 984.

- Odour intensities,**  
odour pollution, man, hedonics 679.  
taste intensities-relationship 1075.
- Odour perception,**  
rats, olfactory bulb, spatial patterns 31.
- Odour pollution,**  
animal housing, odour control 230.  
lagoons 229.
- man, odour preferences 676.  
odour intensities, man, hedonics 679.  
paper mills, olfactory thresholds 1533.  
pigs-housing, quantification 1536.  
potatoes processing, volatiles 1535.  
sampling 988.
- sugar factory, legislation 232.
- sugar processing 987.
- Odour preferences,**  
development 682.  
learning/evolution-role 897.  
man, hedonics 677, 689.  
man, hedonics, descriptive profile/emotional profile 678.  
man, multidimensional scaling 680.  
man, odour pollution-effects on 676.  
man, olfactory disorders-relationship 693.  
taste preferences 681.
- Odour stimuli,**  
Rana ridibunda, olfactory cells 1057.
- Odours profiles,**  
amino acids/D-fructose/D-arabino-hexosulose-reaction 1449.
- Oecophylla smaragdina,**  
trail following behaviour, bioassays 858.
- Oestrus,**  
dogs, urine odours, response 1333.
- mice, urine odours-effects on 148.
- rats, olfactory bulb, mitral cells activity 1334.
- rats, olfactory bulbs 32.
- Oestrus cycle,**  
hamsters, reproductive behaviour 868.
- Off flavour,**  
see **Off odour and Taints**  
asparagus, acephate-effects on 1560.  
beef patties, cooking-effects on 1567.  
cloves, storage effects, essential oils 1005.  
cod, hept-cis-4-enal 963.
- coffee, 2-methylfuran/2-butanone, quantification 261.
- eggs, trimethylamine 1557.  
rice, lipoxygenase-effects on 1558.  
soybeans, freezing-effects on 1562.  
vegetables-dried, storage effects, models 1561.
- beef/chickens, warmed-over-flavour, phospholipids/  
triglycerides-role 1011.
- beer, isohumulones-degradation 263.
- broccoli, storage effects, carbon dioxide-effects on 1559.  
Brussels sprouts, cultivation-effects on 1004.
- cod, storage effects, starvation-effects on 254.
- coffee, aroma compounds 196.  
corn chips, bitterness, germination-effects on 245.  
corn-on-the-cob, peroxidase-relationship 249.
- coryneform bacteria-effects on 947.  
cowpea powder 1002, 1003.  
dates, storage effects 1001.  
food, aldehyde dehydrogenase-effects on 1000.
- frankfurters, proteins-effects on 257.  
kamaboko, hydrogen sulphide, temperature effects 259.  
legumes, lipoxygenase-effects on 248.  
meat, warmed-over-flavour, haeme pigments-effects on 256.  
milk, bacteria-effects on 244.
- milk, organoleptic evaluation 1555.  
milk, wheat diets-effects on, assays 1615.  
mutton, aldehyde dehydrogenase-effects on 1006.
- orange juice, review 235.  
raisins, methyl oleate/ethyl oleate-effects on 250.  
sake, dimethyl sulphide 264.
- shrimps, ammonia, quantification 1605.
- soya proteins 253.
- soyabeans, aldehyde dehydrogenase-effects on 1006, 1007.
- vegetable proteins 252.  
wine, Schizosaccharomyces pombe-effects on 265.
- Off odour,**  
see **Off flavour and Taints**  
beer, Saccharomyces cerevisiae killer factor-effects on 1571.  
krill, aroma compounds 1470.  
meat, Pseudomonas fluorescens-effects on 1570.  
sardines, volatiles 1564.
- broccoli, storage effects, carbon dioxide-effects on 1559.
- chickens, bacteria-effects on 255.  
chickens, effects on-effects on 260.  
chickens, vacuum packaging-effects on 258.  
chickens, volatiles, isobutyronitrile/isobutyraldoxime O-methyl ether/methacrylonitrile/methacrylaldoxime O-methyl ether 195.  
coffee, packaging-effects on 262.  
eggs, hens, trimethyl oxidase-activity 243.  
eggs, rapeseed diets-effects on 242.
- oysters, iodophors-effects on 1566.  
shrimps, ammonia, quantification 1605.
- vegetable proteins 252.  
water supplies, quantification 240.  
water supplies, Streptomyces-effects on 241.
- Oidaematophorus monodactylus,**  
reproductive behaviour, attractants, (Z)-9-dodecenal 1224.
- Oil pollution,**  
mullet, taints 1008.
- Oils,**  
see **Essential oils**
- rancidity, phospholipids-effects on 251.
- Olefins,**  
Lepidoptera, pheromones 1444.

- Oleoresins**,  
ginger, pungent principles 1525.
- Olfactometers**,  
*Aedes aegypti*, host searching behaviour 1035.  
aroma compounds, organoleptic evaluation 1616.  
hyposmia, man 1089.  
insects, electroantennograms 1598.  
man, book 1093.  
man, EEG 1094.
- Olfactory bulb**,  
see **Bulbectomy**  
bats, accessory 1144.  
*Carassius auratus*, telencephalon-relationship 1108.  
chickens 1115.  
computer models 1049.  
electrophysiological recording 1053.  
electrophysiological recording, models 1052.  
mice, deoxyglucose-uptake 1116.  
mice, glutamate decarboxylase, social environment-effects on 1117.  
rats, apomorphine-content 1128.  
rats, DNA biosynthesis 1132.  
rats, dopamine, aggressive behaviour 1129.  
rats, mitral cells activity, oestrus-effects on 1334.
- rats, odour perception, spatial patterns 31.
- rats, predatory aggression, monoamines-metabolism 939.  
rats/hamsters, noradrenaline-content, castration-effects on 706.  
*Saimiri sciureus*, regeneration, olfactory nerves lesions-effects on 1138.
- Ambystoma tigrinum*, olfactory receptors, temporal firing patterns 669.
- gecko, GABA/bicuculline/carnosine-effects on 11.  
mice, carnosine/carnosine synthetase 29.  
mice, regeneration 28.
- rats, choline acetyltransferase/acetylcholinesterase-activities 1133.  
rats, 2-deoxy-D-glucose-uptake 1125.  
rats, development, anosmia-effects on 707.
- rats, oestrus-effects on 32.
- Olfactory cells**,  
*Ips pini*, pheromones/host volatiles-effects on 5.
- Rana ridibunda*, electrical stimulation-effects on 1056.  
*Rana ridibunda*, odour stimuli-effects on 1057.
- Olfactory cortex**,  
guinea pigs, AMP (cyclic), serotonin/GABA-effects on 30.
- guinea-pigs, anaesthetics-effects on 1120.  
rats, pentobarbitone-effects on 1130.  
rats, transduction mechanisms, aspartate 671.
- Olfactory discrimination**,  
rats, brain lesions/bulbectomy-effects on 1392.  
rats, lateral olfactory tract lesions-effects on 1393.
- Olfactory discrimination learning**,  
rats 910.
- Olfactory disorders**,  
man, odour preferences-relationship 693.
- Olfactory epithelium**,  
*Ambystoma tigrinum*, olfactory receptors, temporal firing patterns 669.  
*Anguilliformes/Myctophiformes* 1106.  
*Atheriniformes* 1107.  
*Cypriniformes* 1109.  
frog, electro-olfactograms, alcohols, structure-activity relationships 670.  
guinea-pigs, urine non-volatiles-effects on 1119.
- mice, carnosine/carnosine synthetase 29.
- pigs, bulbectomy-effects on 1337.  
rats, camphor receptors 705.  
sheep 1135.  
squirrel monkeys, regeneration 1137.  
*Tetraodontiformes* 1111.
- Olfactory mucosa**,  
cattle, proteins 1105.
- man, neuroblastoma 21.
- Olfactory nerve lesions**,  
pigeons, homing behaviour 937.
- mice, foraging 1399.  
*Saimiri sciureus*, olfactory bulb-regeneration 1138.
- Olfactory organs**,  
*Cyprinidae* 1110.  
*Dasyatis sabina*, electrophysiological recording, amino acids-effects on 1054.  
man, tumours 1092.  
*Protopterus annectens*, water transport, terminology 703.
- Olfactory pathways**,  
pigeons, electrophysiological recording 1058.
- Olfactory perception**,  
*Carnivora* 173.
- Crotaphopeltis hotamboeia/Duberria lutrix/Varanus albigularis*, tongue-role 1112.
- Esox lucius/Tinca tinca*, trigeminal nerves 10.  
insects, mechanism 1.  
*Leptinotarsa decemlineata*, antennal chemoreceptors 7.
- man, genetics 1091.
- man, saliva flow 22.  
*Panulirus argus* 27.
- review 1623.  
roe deer, grazing 1436.  
*Scolytidae*, pheromones receptors, review 668.  
structure-activity relationships 1501.  
vertebrates, sensory transduction, receptors 1048.
- Olfactory preferences**,  
hamsters, ontogeny 873.  
hamsters/rats, early experience, sex differences 1343.  
man, perfumery, complexity-relationship 1073.  
mice, early experience 1341.  
mice, imprinting/genetics 1339.  
rats, bioassays 1030.  
rats, nesting behaviour 1344.
- Olfactory properties**,  
*Oryza sativa*, genetics 1042.
- Olfactory receptors**,  
*Ambystoma tigrinum*, olfactory epithelium/olfactory bulbs, temporal firing patterns 669.
- Olfactory sensitivity**,  
man, circadian rhythms 1074.



- Olfactory stimuli**,  
cats, hippocampus 1060.  
*Dicrostonyx groenlandicus*, memory 1328.  
man, visual communication 931.  
rats/*Sigmodon hispidus*, aversion learning 1380.
- Olfactory thresholds**,  
man, hyposmia, pyridine scale technique 1090.  
paper mills, odour pollution 1533.
- Olfactory tubercle**,  
mice, noradrenaline/dopamine, aggressive behaviour-effects on 1118.  
rats, adenylate cyclase-content 708.  
rats, aggressive behaviour, atropine 940.  
rats, choline acetyltransferase/glutamic acid decarboxylase-activities, bullectomy-effects on 1124.  
rats, glutamic decarboxylase activities, bullectomy-effects on 1127.  
rats, tyrosine hydroxylase activities, bullectomy-effects on 1122.
- Olfactory tubercle lesions**,  
rats, avoidance learning 904.
- Onchidium verruculatum***,  
trail following behaviour 1324.
- Oncomelanus fasciatus***,  
aggregation behaviour, pheromones 1314.
- Onion powder**,  
radiation ( $\gamma$ )-effects on 993.
- Onions**,  
processing, deodorization, ozone-effects on 983.  
tissue culture, flavour compounds, alliinase 955.  
volatiles, flavour compounds 1457.
- Ontogeny**,  
hamsters, olfactory preferences 873.
- Onychiurus armatus***,  
aggregation, pheromones 1315.
- Ooencyrtus kuwanai***,  
parasitism, disparlure-effects on 85.
- Ophrys**,  
*Eucera longicornis*, attractants 849.
- Oral cavities**,  
*Rana japonica*, premetamorphic papillae 1140.
- Orange juice**,  
aroma compounds, review 1467.  
flavour compounds/off flavours, review 235.  
organoleptic evaluation 1580.  
organoleptic evaluation, sweetness/sourness-effects on 1015.  
volatiles, headspace analysis 954.
- Oranges**,  
flavour compounds, bitterness, flavanones 211.
- Orchesella cincta***,  
aggregation behaviour, pheromones 1316.
- Oregano**,  
flavour compounds 981.
- Orfalu**,  
*Grapholitha molesta*, pest control, pheromones 1285.
- Organic acids**,  
wine, ageing 1477.
- Organoleptic evaluation**,  
see Taste panel evaluation  
apple wine/cider, bitterness 285.  
aroma compounds, olfactometers 1616.  
beef 1593.  
beef, chilling-effects on 280.  
beef, fatty acids, diets-effects on 279.  
beef, grinding methods-effects on 997.  
beef, microwave cooking-effects on 1025.  
beef loaves, soya protein/chickpea meal-effects on 1026.  
beef patties, soya protein-effects on 282.  
blueberries, triflorine-effects on 1583.  
bread, potato flour-effects on 1577.  
carrots, flavour compounds 1458.  
Cheddar cheese 270.  
coffee, storage effects 283.  
Coryphaenoides acrolepis, storage effects 1020.  
eggs, protein diets-effects on 1556.  
essential oils 276.  
fish sausages, mutton fat-effects on 237.  
food 267.  
grapes skins 295.  
ham, curing-effects on 1029, 1592.  
ice cream, high fructose corn syrup-effects on 272.  
ice cream, lactose-effects on 1576.  
lamb, breeds-effects on 1028.  
milk, off flavours 1555.  
multidimensional scaling models 1573.  
orange juice 1580.  
orange juice, sweetness/sourness-effects on 1015.  
peanut butter, peanut shell flour-effects on 275.  
pork, growth factors-effects on 1590.  
pork, rancidity, pentane-production 1569.  
pork, restructuring-effects on 998.  
sausage, starter cultures-effects on 278.  
sausages/meat products, *Paecilomyces varioti*-effects on 1546.  
soy curd, calcium-effects on 1584.  
soya sauce, aroma compounds 957, 958, 959.  
strawberry, aroma compounds 1582.  
sweet corn, genetics 1019.  
tomatoes, volatiles 1018.  
tomatoes/peppers, marketing-effects on 1016.  
tortillas, corn flour-extrusion-effects on 274.  
trout, herbicides-effects on 1565.  
wine 286.  
wine, *Uncinula necator*, mildew-effects on 1572.  
milk, ultrahigh temperature-effects on 1012.  
***Orgyia pseudotsugata***,  
pest control, pheromones 828.  
**Orientation**,  
*Blattella germanica*, reproductive behaviour 761.  
Culicidae, carbon dioxide-effects on 844.  
disruption, *Saimiri sciureus*, aversion learning 915.

**Orientation,**

*Neivamyrmex nigrescens* 138.

**Ornithodoros concanensis,**

temperature preferences, pheromones 1303.

**Oryctes rhinoceros,**

attractants, ( $\pm$ )-des-N-morphinan 117.

**Oryza,**

deterrents, *Liparparvata lugens*, feeding behaviour 1264.

**Oryza sativa,**

olfactory properties, genetics 1042.

**Oryzomys longicaudatus,**

food selection 1398.

**Osmoregulation,**

hepatic chemoreceptors, sodium-effects on 1069.

**Osteosarcoma,**

monocytes-mice, chemotaxis 1173.

**Ostrinia nubilalis,**

pheromones, genetics 778.

**Otocyon megalotis,**

marking behaviour 1360.

**Ouabain,**

rats, taste aversion learning, memory 905.

**Oviposition,**

see **Reproductive behaviour**

*Acanthoscelides obtectus/Bruchus pisorum/Pieris brassicae* 69.

*Acrolepiopsis assectella*, pheromones-effects on 1226.

*Aedes caspius* 759.

*Anastrepha suspensa*, site selection 1229.

*Crioceris duodecimpunctata*, pheromones-effects on 1235.

*Culex pipiens/Culex tarsalis* 1237.

*Culex tarsalis/Culex pipiens quinquefasciatus*, attractants/repellents 1236.

*Dacus oleae* 80.

*Delia brassicae*, host searching behaviour 81.

*Delia brassicae*, tarsal chemoreceptors, host searching behaviour 3.

*Gelis tenellus*, host selection, kairomones 1240.

*Hylemya*, pheromones 774.

*Lycaena dorcas/Lycaena helloides*, host selection 1248.

*Phthorimaea operculella* 88.

*Spodoptera litura*, repellents, *Melia azadirachta* extracts 1295.

**Ovulation,**

mice, pheromones-effects on 1330.

**Oxathiazinone dioxides,**

sweeteners, synthesis 1508.

**Oximes,**

sweeteners, synthesis 1506.

**Oxygen receptors,**

*Salmo gairdneri*, anaesthetics-effects on 1142.

**Oysters,**

off odours, iodophors-effects on 1566.

**Ozone,**

onions/garlic processing, deodorization 983.

**Packaging,**

coffee, off odours 262.

peanuts/pecans, storage effects 1543.

**Paecilomyces varioti,**

sausages/meat products, organoleptic evaluation 1546.

**Pagurus longicarpus,**

predatory behaviour 1321.

*Bonellia viridis*, defence mechanisms 1322.

*Notophthalmus viridescens/Pseudotriton*, chickens 1396.

pigs, food intake 169.

**Palatability,**

pork, temperature effects 1549.

**Palate chemoreceptors,**

*Anguilla japonica*, amino acids-effects on 1063.

**Palates,**

*Cirrhinus mrigala*, taste buds 710.711.

**Panagrellus redivivus,**

attractants 757.

**Pancreas secretions,**

dogs, taste stimuli-effects on 928.

**Pandemis heparana,**

reproductive behaviour, pheromones 86.

**Panorpa,**

pheromones, reproductive behaviour 779.

**Panulirus argus,**

olfactory perception 27.

**Paper mills,**

odour pollution, olfactory thresholds 1533.

**Parabranchial pons,**

hamsters, taste stimuli-effects on, taste aversion learning-correlation 673.

**Paracresol,**

perfumery, legislation, toxicity 1617.

**Paramecium aurelia,**

chemotaxis, swimming behaviour 65.

**Parasitism,**

*Ooencyrtus kuwanai*, disparlure-effects on 85.

**Parental behaviour,**

mice, social environment 1342.

**Patchoulol,**

synthesis 1495.

**Peaches,**

flavour compounds, storage effects 1465.

**Peanut butter,**

organoleptic evaluation, peanut shell flour-effects on 275.

**Peanut shell flour,**

peanut butter, organoleptic evaluation 275.

**Peanuts,**

storage effects, packaging-effects on 1543.

**Peanuts flour,**

beef patties 1550.

**Peas flour,**

bread 1579.

**Pecan nuts,**

volatiles 1456.

steaming-effects on 1544.

storage effects, packaging-effects on 1543.

**Pectinophora gossypiella,**

traps baits, pheromones 829.

traps baits, pheromones, gossypure 118, 1290, 1291.

**Pedipalp chemoreceptors,**

*Buthus occitanus*, feeding behaviour 107.

- Pentane**,  
pork, organoleptic evaluation, rancidity 1569.
- Pentobarbitone**,  
rats, olfactory cortex 1130.
- Pentylene-tetrazol**,  
rats, taste aversion learning 1379.
- Pepper**,  
see **Capsicum**
- Piper nigrum**, phenolic compounds 1628.
- Peptococcus anaerobius**,  
leucocytes (neutrophilic)-guinea-pigs, chemotaxis 1181.
- Perfumery**,  
legislation, toxicity, paracresol 1617.
- man, olfactory preferences, complexity-relationship 1073.
- shampoo/creme hair rinse 228.
- toxicity 979.
- toxicity, hypersensitivity 978.
- trans-Perillenol**,  
Neodiprion sertifer, pheromones 140.
- Perineal glands**,  
guinea-pigs, volatiles 889.
- Periodontitis**,  
man, leucocytes (polymorphonuclear), chemotaxis 1099.
- Peripheral chemoreceptors**,  
cats, aortic nerves, horseradish peroxidase transport 1146.
- Periplaneta americana**,  
antennal chemoreceptors, pheromones-effects on,  
electroantennograms 667.
- pheromones, pinan-3-ol derivatives-synthesis 1445.
- pheromones-production, arylsulphatase-role 780.
- Perognathus fallax**,  
conspecific/interspecific odours-effects on 1350.
- Peromyscus maniculatus**,  
conspecific/interspecific odours-effects on 1350.
- Peroxidase**,  
corn-on-the-cob, off flavours 249.
- Pest control**,  
Dendroctonus frontalis, frontalure 1282.
- Ephesia cautella, pheromones 817.
- Grapholitha molesta, pheromones, Orfralure 1285.
- Heliothis, (Z)-9-tetradecen-1-ol formate 1287.
- Insecta, pheromones, models 1276.
- insects, pheromones 1275.
- Lymantria dispar, pheromones, disparlure 826.
- Orgyia pseudotsugata, pheromones 828.
- Spodoptera littoralis, pheromones 1296.
- Trypodendron lineatum, pheromones, lineatin 1288.
- Peucedanum ferulaefolium**,  
essential oils 223.
- Phaedon brassicae**,  
defence secretions, chrysomelid 850.
- Phagodeterrants**,  
Hemileuca oliviae/Melanoplus sanguinipes/Schizaphis  
graminum/Hypera postica, zanthophylline 792.
- Phagorepellents**,  
Yponomeuta, contact chemoreceptors 1062.
- Phagostimulants**,  
Eurema hecabe, Lepedeza cuneata 99.
- grasshoppers, attractants 112.
- Phyllotreta armoraciae**, flavonol glycosides/glucosinolates  
802.
- Scolytidae, terpenoids 1268.
- Yponomeuta, contact chemoreceptors 1062.
- Phalaenoides glycinae**,  
pheromones, 2-phenylethanol/2-phenyl-2-  
phenylethanolacetate 87.
- Pheidole biconstricta**,  
defensive behaviour, pygidial gland 859.
- Phenolic compounds**,  
cherries 1466.
- pepper/cloves/allspice 1628.
- sunflowers proteins 1547.
- wine 1486.
- Phenols**,  
Costelytra zealandica, attractants 815.
- 2-Phenyl-2-phenylethanolacetate**,  
Phalaenoides glycinae, pheromones 87.
- 2-Phenylethanol**,  
Phalaenoides glycinae, pheromones 87.
- 2-Phenylethyl alcohol**,  
wine, aroma compounds 967.
- Phenylthiocarbamide**,  
taste perception, man, genetics 1097.
- Pheromones**,  
Acrolepia alliella, reproductive behaviour, (Z)-11-  
hexadecenyl acetate/(Z)-11-hexadecenol 70.
- Acrolepiopsis assectella, oviposition 1226.
- Adoxophyes, 11-methyl-cis-9,12-tridecadienyl acetate 1438.
- Adoxophyes, 10-methyldodecyl acetate-synthesis 178.
- Alpinobombus, marking behaviour 840.
- Amblyomma variegatum, aggregation behaviour 1299.
- Amyelcis transistella, (Z,Z)-11,13-hexadecadienol 1228.
- Amyelcis transistella, (Z,Z)-11,13-hexadecadienol-synthesis  
1439.
- Andrena, reproductive behaviour 71.
- Andrena, reproductive behaviour 760.
- Anthonomus grandis, (+)-cis-2-isopropenyl-1-  
methylcyclobutaneethanol/(Z)-3,3-dimethyl- $\Delta^1\beta$ -  
cyclohexaneethanol/ $\beta$ -caryophyllene 1230.
- Aonidiella citrina, (E)-3,9-dimethyl-6-isopropyl-5,8-decadien-  
1-yl a 72.
- Aonidiella citrina, (E)-3,9-dimethyl-6-isopropyl-5,8-decadien-  
1-yl a, synthesis 942.
- Apanteles glomeratus, reproductive behaviour 73.
- Apis cerana, social behaviour, queens 842.
- Apis mellifera, foraging behaviour 795.
- Apis mellifera, queens 1302.
- Apis mellifera, swarming behaviour 841.
- Argas cooleyi/Ornithodoros concanensis, temperature  
preferences 1303.
- bees, queen, synthesis 1440.
- Blattella germanica, 3,11-dimethyl-2-nonacosanone,  
synthesis 1441.
- Bombus, labial gland secretions 74.
- Callosamia promethea, circadian rhythms 1231.
- Ceratitis capitata, reproductive behaviour, radiation ( $\gamma$ )-  
effects on 75.
- Chilo partellus, (Z)-11-hexadecenol/(Z)-11-hexadecen-1-ol



## Pheromones, (continued)

- 77.
- Chilo suppressalis*, (Z)-13-octadecenal-synthesis 1442.
- Chilo suppressalis*, reproductive behaviour 1232.
- Choristoneura fumiferana*, reproductive behaviour, attraction/disruption 765.
- Choristoneura fumiferana*, reproductive behaviour 762, 763.
- Choristoneura fumiferana*, trans-11-tetradecenyl acetate 764.
- Choristoneura fumiferana*, traps baits 813.
- Choristoneura rosaceana* 78.
- Colias*, reproductive behaviour 1234.
- Colias eurytheme/Colias philodice*, reproductive behaviour 1233.
- Colletes validus*, reproductive behaviour 79.
- Crioceris duodecimpunctata*, oviposition 1235.
- Cryptolestes ferrugineus*, aggregation behaviour 128.
- Cucullia umbratica/Sesamia cretica*, attractants 1294.
- Culex pipiens quinquefasciatus*, flight activity, circadian rhythms 1305.
- Cydia pomonella*, traps baits 1279.
- Dacus tryoni/Dacus neohumeralis*, rectal glands 766.
- Dendroctonus brevicomis*, population dynamics 974.
- Dendroctonus brevicomis*, traps baits 1281.
- Dendroctonus frontalis*, aggregation behaviour 1306.
- Dendroctonus jeffreyi*, aggregation behaviour, 1-heptanol/2-heptanol 129.
- Dendroctonus pseudotsugae*, sound production, geographical variations 845.
- Dermestes maculatus*, isopropyl carboxylates 846.
- Dermestes maculatus*, reproductive behaviour 767.
- Drosophila melanogaster*, reproductive behaviour 769, 770.
- Earias insulana*, attractants, (E,E)-10,12-hexadecadienal 816.
- Earias insulana*, (E,E)-10,12-Hexadecadienal 771.
- Elasmucha grisea*, trail following behaviour/alarm behaviour/defence secretions 131.
- Ephestia cautella*, pest control 817.
- Ephestia cautella*, reproductive behaviour 1238.
- Euroleon nostras/Grocus bore/Myrmeleon formicarius*, reproductive isolation, nerol 1239.
- Formica rufa*, nursing behaviour 1308.
- Formica sanguinea*, trail following behaviour 132.
- Gnathotrichus retusus/Gnathotrichus sulcatus*, aggregation behaviour 133.
- Gnathotrichus sulcatus*, traps baits 115.
- Grapholitha molesta*, pest control, Orfuralure 1285.
- Grapholitha molesta*, reproductive behaviour 772.
- Grapholitha molesta*, traps baits 1284.
- Hedya nubiferana*, reproductive behaviour, (E,E)-8,10-dodecadienyl acetate/(Z)-8-dodecenyl acetate 1223.
- Heliothis virescens*, (Z)-11-hexadecenal/(Z)-9-tetradecenal-synthesis 179.
- Heliothis virescens*, reproductive behaviour 1243.
- Heliothis virescens*, traps baits 819.
- Heliothis virescens*, traps baits, (Z)-11-hexadecenal/(Z)-9-tetradecenal 821.
- Heliothis zea* 1242.
- Heliothis zea*, traps baits 820.
- Hemileuca*, reproductive isolation 1244.
- Homarus americanus*, reproductive behaviour 1256.
- Hyalophora cecropia*, reproductive behaviour 773.
- Hylemya*, oviposition 774.
- Hyphantria cunea*, n-tetradecane/1-tetradecanol, metamorphosis-effects on 82.
- Insecta, pest control, models 1276.
- insects, acetates, evaporation, quantification 809.
- insects, pest control 1275.
- insects, synthesis 179.
- Ips*, reproductive behaviour 1245.
- Ips cembrae*, myrcene-effects on, production 853.
- Ips paraconfusus*, biosynthesis 1246.
- Ips paraconfusus*, *Dendroctonus brevicomis*-inhibition 1307.
- Ips pini*, antennal chemoreceptors, electroantennogram 6.
- Ips pini*, olfactory cells 5.
- Ips typographus*, aggregation 854.
- Keiferia lycopersicella*, reproductive behaviour 1247.
- Keiferia lycopersicella*, traps baits 808.
- Lasioderma serricorne*, 4,6-dimethyl-7-hydroxy-nonan-3-one 775.
- Laspeyresia pomonella*, traps baits 108.
- Leperisinus californicus*, aggregation 1311.
- Lepidoptera, olefins-synthesis 1444.
- Lepidoptera, traps baits 825.
- Leptothorax, recruitment 135.
- Lygaeus kalmii/Oncopeltus fasciatus*, aggregation behaviour 1314.
- Lymantria dispar*, pest control, disparlure 826.
- Mamestra brassicae*, reproductive behaviour, (Z)-11-hexadecenyl acetate/(Z)-11-hetadecenyl acetate-synthesis 1225.
- Mamestra brassicae*, Z-11-hexadecenyl acetate/E-11-hexadecenyl acetate/Z-11-hexadecenol/Z-9-tetradecenyl acetate 1249.
- Mamestra configurata*, traps baits 827.
- Manduca sexta*, (E,Z)-10,12-hexadecadienal 84.
- Metaseiulus occidentalis*, reproductive behaviour 1250.
- mice, aggressive behaviour 1351.
- mice, ovulation 1330.
- mice, reproductive behaviour 1329.
- Monomorium pharaonis*, queens, reproductive behaviour 68.
- Musca domestica*, muscalure, synthesis 943.
- Nauphoeta cinerea*, reproductive behaviour 776.
- Neodiprion sertifer*, trans-perillenal 140.
- Onychiurus armatus*, aggregation 1315.

**Pheromones, (continued)**

- Orchesella cincta*, aggregation behaviour 1316.  
*Orgyia pseudotsugata*, pest control 828.  
*Ostrinia nubilalis*, genetics 778.
- Pandemis heparana*, reproductive behaviour 86.
- Panorpa*, reproductive behaviour 779.  
*Pectinophora gossypiella*, traps baits 829.
- Pectinophora gossypiella*, traps baits, gossypilure 118.
- Pectinophora gossypiella*, traps baits, gossypilure 1290.  
*Periplaneta americana*, antennal chemoreceptors, electroantennograms 667.  
*Periplaneta americana*, pinan-3-ol derivatives-synthesis 1445.  
*Periplaneta americana*, production, arylsulphatase-role 780.
- Phalaenoides glycinae*, 2-phenylethanol/2-phenyl-2-phenylethanolacetate 87.
- Phthorimaea operculella*, reproductive behaviour 782.
- Phthorimaea operculella*, traps baits 119.
- Phthorimaea operculella*, traps baits 830, 831, 1292.  
*Pieris melete*, geraniol/nerol/geranial/neral 781.
- pigs, 5 $\alpha$ -androst-16-en-3-one-synthesis 180.  
*Plodia interpunctella*/Sitotroga cerealella, traps baits 120.  
*Prays citri*, traps baits, (Z)-7-tetradecenal 121.  
*Prays oleae*, reproductive behaviour, (Z)-7-tetradecenal 90.  
*Prays oleae*, reproductive behaviour, Z-7-tetradecen-1-ol, electroantennograms 91.
- Procambarus clarkii*, reproductive behaviour 789.  
*Pseudaletia unipuncta*, reproductive behaviour 783.  
*Pseudaulascaspis pentagona*, (RZ)-3,9-dimethyl-6-isopropenyl-3,9-decadien-1-ol-characterization 1257.  
*Pseudococcus calceolariae*, collection 1032.  
*Pseudococcus comstocki*, traps baits 832.  
*Quadraspidiotus perniciosus*, 7-methyl-3-methylene-7-octen-1-yl propanoate/(Z)-3,7-dimethyl-2,7-octadien-1-yl propanoate-synthesis 1446.  
*Quadraspidiotus perniciosus* (2)-3,7-dimethyl-2,7-octadien-1-yl/propanoate 1241.
- Ramosia rileyana*, *Synanthedon pictipes*, interspecific hybridization 1251.  
rats, maternal behaviour, bile 1345.
- reproductive behaviour, *Streptococcus faecalis* 299.
- Rhyacionia buoliana*, traps baits 1293.  
*Rhyacionia subtropica*, traps baits, (E)-9-dodecenyl acetate 833.  
*Saccharomyces cerevisiae*, mating types 1625.  
*Salmo alpinus*, fractionation 1603.
- Sarcophaga bullata*, hexanal 92.
- Scolytus multistriatus*, traps baits 835.  
*Scolytus multistriatus*, (+)-(3R,4R)-4-methyl-3-heptanol-synthesis 1447.
- Scolytus multistriatus*, Multilure, responses 144.  
*Scolytus multistriatus*, traps baits 834.
- Selatossomus latus*, secretion 784.  
*Solenopsis*, trail following behaviour 1319.  
*Spodoptera frugiperda*, reproductive behaviour 786.  
*Spodoptera frugiperda*, traps baits 1297.  
*Spodoptera frugiperda*, traps baits, (S)-9-tetradecen-1-ol acetate 785.  
*Spodoptera littoralis*, pest control 1296.  
*Stegobium paniceum*, 2,3-dihydro-2,3,5-trimethyl-6-(1-methyl-2-oxobut 787.  
*Synanthedon exitiosa*/*Synanthedon pictipes*, synthesis 1448.  
*Tetranychus urticae*, citronellol, reproductive behaviour 1252.
- Tortricidae*, traps baits 109.
- Tortrix viridana*, (Z)-11-tetradecenyl acetate 1253.  
*Trichinella*, reproductive isolation 1258.  
*Trichoplusia ni*, antennal chemoreceptors, esterases, hydrolysis 1103.  
*Trypodendron lineatum*, aggregation behaviour, 4,6,6-lineatin 945.  
*Trypodendron lineatum*, pest control, lineatin 1288.  
*Volvox carteri*, radiation (u.v.)-effects on 1041.
- Pheromones glands,**  
*Plodia interpunctella*, cell culture 1033.
- Poecilocerus pictus* 89.
- Postelectrotermes nayari*, trail following behaviour, sternal gland 861.  
*Trichoptera* 1254.  
*Tryporyza incertulas* 1255.
- Pheromones inhibitors,**  
*Spodoptera litura*, (Z)-9-tetradecenyl acetate 122.
- Pheromones receptors,**  
*Adoxophyes orana*, antennal chemoreceptors, electroantennogram 2.
- insects 758.
- Ips typographus*, electroantennogram 4.
- Scolytidae*, olfactory perception, review 668.
- Phocoena phocoena,**  
chemoreceptors 1150.
- Phormia regina,**  
labellar chemoreceptors, electrical properties, age-effects on 701.  
taste receptors, ziziphin-effects on, taste modifiers, *Ziziphus jujuba* 1526.
- Phospholipase,**  
frogs, tongue, calcium receptors 1065.
- Phospholipase A2,**  
leucocytes (polymorphonuclear)-man, eosinophil chemotactic factor-release, arachidonic acid-role 1198.
- Phospholipids,**  
beef/chickens, off flavours, warmed-over-flavour 1011.
- oils/fats, rancidity 251.
- Phototaxis,**  
*Euglena gracilis*, chemotaxis 756.
- Phototrophic bacteria,**  
chemotaxis 54.
- Phthorimaea operculella,**  
oviposition 88.  
reproductive behaviour, pheromones 782.  
traps baits, pheromones 119, 830, 831, 1292.

- Phylloctecta laticollis**,  
host preference, *Salix*/*Populus* 103.
- Phyllodoce mucosa**,  
anti-predator behaviour 1325.
- Phyllotreta armoraciae**,  
food preferences 104.  
phagostimulants, flavonol glycosides/glucosinolates 802.
- Phyllotreta nemorum**,  
food preferences 104.
- Phyllotreta tetrastigma**,  
food preferences 104.
- Phyllotreta undulata**,  
food preferences 104.
- Physarum polycephalum**,  
chemotaxis, acidity-effects on 752.  
chemotaxis, AMP (cyclic)-effects on 753.  
chemotaxis, 3':5'-cyclic-nucleotide phosphodiesterase-role 754.  
chemotaxis, membrane potential 1219, 1220.  
chemotaxis, plasmodia oscillation-mechanisms 755.  
chemotaxis mechanisms 62.
- Phytophthora megasperma**,  
zoospores, chemotaxis, *Medicago sativa* 63.
- Phytuberol**,  
tobacco, flavour compounds 1496.
- Pieris brassicae**,  
oviposition 69.
- Pieris melete**,  
pheromones, geraniol/nerol/geranial/neral 781.
- Pigeons**,  
homing behaviour 1427.  
homing behaviour, anosmia-effects on 1428, 1429  
homing behaviour, olfactory nerve lesions-effects on 937.  
homing behaviour, olfactory stimuli effects on 1430.  
olfactory pathways, electrophysiological recording 1058.
- Pigs**,  
see **Pork**  
food intake, flavourings-effects on 1418.
- food intake, palatability-effects on 169.  
food preferences 170.
- housing, odour pollution, quantification 1536.  
leucocytes (neutrophilic), chemotaxis 1175.  
manure, deodorization 1529, 1530.
- pheromones-5 $\alpha$ -androst-16-en-3-one-synthesis 180.
- reproductive behaviour/aggressive behaviour/olfactory  
epithelium, bulbectomy-effects on 1337.
- Pigs housing**,  
deodorization 1531.
- Pigs manure**,  
odour control 986.
- volatiles, fatty acids 989.
- Pimenta dioica**,  
phenolic compounds 1628.
- Pimpinella anisum**,  
essential oils, *Sclerotinia sclerotiorum*-effects on 1518.
- Pimpinella Stewartii**,  
essential oils 224.
- Pinan-3-ol derivatives**,  
*Periplaneta americana*, pheromones 1445.
- Pine**,  
resin, volatiles 1498.
- Pinot noir grapes**,  
wine, volatiles 1479.
- Piper nigrum**,  
phenolic compounds 1628.
- Pituitary-adrenal system**,  
mice, social environment-effects on 887.
- Pityrosporum**,  
volatiles,  $\gamma$ -lactones 969.
- Plagioderia versicolora distincta**,  
defence secretions 1312.
- Plant extracts**,  
*Aphis fabae*, host selection 793.
- Plants**,  
Insecta, feeding behaviour 1260.  
volatiles, *Malacosoma americanum*, antennal  
chemoreceptors 1046.
- Plecoptera**,  
predator-prey interactions, Ephemeroptera 1045.
- Plodia interpunctella**,  
pheromones glands, cell culture 1033.  
traps baits, pheromones 120.
- Plums**,  
aroma compounds, collection, Porapak Q 1609.
- Poecilocerus pictus**,  
pheromones glands 89.
- Polistes foederatus**,  
anti-predator behaviour 860.
- Polistes gallicus**,  
anti-predator behaviour 860.
- Polistes nimpha**,  
anti-predator behaviour 860.
- Pollination**,  
*Cypripedium calceolus*, *Andrena haemorrhoa* 1300.
- Pollution effects**,  
water quality 1039.
- Polyphenolic compounds**,  
whisky/brandy, wooden casks-effects on 198.
- Polysphondylium**,  
chemotaxis-negative, repellents 750.
- Population dynamics**,  
*Dendroctonus brevicornis*, pheromones 974.
- Population regulation**,  
mammals, chemical communication-effects on 882.
- Populus**,  
*Phylloctecta laticollis*, host preference 103.
- Porapak Q**,  
plums, aroma compounds, collection 1609.
- Porcellio scaber**,  
alternation behaviour, antennectomy-effects on 141.
- Pork**,  
see **Pigs**  
organoleptic evaluation, growth factors-effects on 1590.  
organoleptic evaluation, rancidity, pentane-production 1569.  
organoleptic evaluation, restructuring-effects on 998.  
palatability, temperature effects 1549.  
taste panel evaluation, cooked 1591.  
taste panel evaluation, polyunsaturated fatty acids contents-  
effects on 1022.
- Pork sausages**,  
taste panel evaluation 1589.
- Port wine**,  
aroma compounds 1483.
- Possum**,  
pulmonary stretch receptors, carbondioxide receptors 675.
- Postelectrotermes nayari**,  
trail following behaviour, pheromones glands, sternal gland  
861.



- Potassium salts**,  
rats, taste cells, taste perception, models 1066.
- Potato flour**,  
bread, organoleptic evaluation 1577.
- Potatoes**,  
flavour compounds, pyrazines/thiazoles 1462.  
glycoalkaloids, bitterness, quantification 1037.  
proteins hydrolysates, bitterness 1563.  
taste panel evaluation, storage effects 277.  
volatiles, *Leptinotarsa decemlineata*-responses 204.
- Potatoes processing**,  
odour pollution, volatiles 1535.
- Potatoes proteins**,  
bitterness 247.
- Prangos pabularia**,  
essential oils 225.
- Praomys daltoni**,  
traps baits 1397.
- Praomys tullbergi**,  
traps baits 1397.
- Prays citri**,  
traps baits, pheromones, (Z)-7-tetradecenal 121.
- Prays oleae**,  
reproductive behaviour, pheromones, (Z)-7-tetradecenal 90.  
reproductive behaviour, pheromones, Z-7-tetradecen-1-al,  
electroantennograms 91.
- Predation**,  
*Homarus americanus*, *Mytilus edulis*/*Modiolus modiolus*  
1272.  
*Megaponera foetens*, chemical communication 1263.
- Predator-prey interactions**,  
Ephemeroptera/Plecoptera 1045.
- Predatory aggression**,  
rats, bullectomy, psychotropic drugs-effects on 1431.  
rats, olfactory bulb, monoamines-metabolism 939.
- Predatory behaviour**,  
*Fundulus similis*/*Callinectes sapidus*/*Melóngea corona*/  
*Clibanarius vittatus*/*Pagurus longicarpus* 1321.  
*Pycnopodia helianthoides*, *Stongylocentrotus purpuratus*/  
*Stongylocentrotus franciscanus* 1273.  
rattlesnakes 919.
- Womersia strandtmanni*, allomones 106.
- Prednisolone**,  
monocytes-man, chemotaxis 1174.
- Preferences**,  
book 1043.
- Premetamorphic papillae**,  
*Rana japonica*, oral cavities 1140.
- Preorbital glands**,  
*Dicotyles tajacu*, marking behaviour 152.
- Rangifer tarandus*, volatiles, 4-heptanone/2-methyl-4-  
heptanone 894.
- Prepyriform cortex**,  
cats, hippocampus-pathway 1134.
- Primary tastes**,  
taste perception, review 20.
- Primates**,  
taste preferences, sweeteners 930.
- Proboscis extension**,  
*Protophormia terraenovae*, feeding behaviour 1265.
- Procambarus clarkii**,  
reproductive behaviour, pheromones 789.
- Processing**,  
beans, *Psophocarpus tetragonolobus* 994.
- Procyonidae**,  
olfactory perception 173.
- Prolactin**,  
rats, bullectomy-effects on 298.
- Promyelocytic leukaemia cells**,  
man, chemotactic factors receptors 715.
- Propanoate**,  
*Quadrastipidiotus perniciosus*, pheromones 1241.
- Propionibacterium acnes**,  
chemotactic factors, leucocytes (polymorphonuclear) 1195.  
chemotactic factors, man, skin diseases 1153.
- Propionibacterium granulosum**,  
chemotactic factors, man, skin diseases 1153.
- Propylthiouracil**,  
man, taste perception, bitterness 694.
- Protease**,  
frogs, tongue, calcium receptors 1065.
- Protein carboxyl-methylase**,  
chemotaxis, role 739.
- Protein diets**,  
eggs, organoleptic evaluation 1556.
- Protein hydrolysates**,  
debitting 209.  
potato/bean/soybean, bitterness 1563.
- Proteinase**,  
Cheddar cheese 1539.
- Proteins**,  
cattle, olfactory mucosa 1105.  
demethylation, *Escherichia coli*, chemotaxis 1206.  
frankfurters, off flavours 257.  
sunflowers, phenolic compounds 1547.
- Proteins modification reagents**,  
*Salmonella typhimurium*, chemotaxis 1215.
- Protonmotive force**,  
*Bacillus subtilis*, chemotaxis 1205.
- Protophormia terraenovae**,  
feeding behaviour, proboscis extension 1265.
- Protopterus annectens**,  
olfactory organs, water transport, terminology 703.
- Pseudaletia unipuncta**,  
reproductive behaviour, pheromones 783.
- Pseudaulascaspis pentagona**,  
pheromones, (RZ)-3,9-dimethyl-6-isopropenyl-3,9-decadien-1-  
ol-characterization 1257.
- Pseudococcus calceolariae**,  
pheromones, collection 1032.
- Pseudococcus comstocki**,  
traps baits, pheromones 832.
- Pseudomonas aeruginosa**,  
chemotaxis, tyrosine chemoreceptors 746.
- Pseudomonas fluorescens**,  
meat, off odour 1570.
- Pseudotriton**,  
palatability, chickens 1396.
- Psila rosae**,  
host searching behaviour, methyl eugenol-effects on 1266.
- Psithyrus**,  
host selection 1317.
- Psophocarpus tetragonolobus**,  
beans, processing-effects on 994.
- Psoriasis**,  
man, leucocytes (neutrophilic), chemotaxis 692.

- Psychoactive drugs**,  
rats, bulbectomy, avoidance learning 156.
- Psychotropic drugs**,  
rats, predatory aggression, bulbectomy 1431.
- Pterostichus melanarius**,  
learning, memory 142.
- Puliciphora borinquensis**,  
running, chemoreception behaviour 856.
- Pulmonary chemoreceptors**,  
turtles, respiration, carbon dioxide-effects on 39.
- Pulmonary stretch receptors**,  
possum, carbondioxide receptors 675.
- Pungent principles**,  
Capsicum annum, capsaicin 1514.  
ginger, oleoresins 1525.  
Zingiber officinale, gingerol, biosynthesis 1513.
- Pycnopodia helianthoides**,  
predatory behaviour, Stongylocentrotus purpuratus/  
Stongylocentrotus franciscanus 1273.
- Pygidial gland**,  
Pheidole biconstricta, defensive behaviour 859.
- Pyrazines**,  
potatoes, flavour compounds 1462.
- $\alpha$ -Pyrrolidone**,  
rice, volatiles 1454.
- Quadraspidiotus perniciosus**,  
pheromones, 7-methyl-3-methylene-7-octen-1-yl propanoate/  
(Z)-3,7-dimethyl-2,7-octadien-1-yl propanoate-synthesis  
1446.  
pheromones, (2)-3,7-dimethyl-2,7-octadien-1-yl/propanoate  
1241.
- Quality control**,  
Cheddar cheese, taste panel evaluation 271.
- Quantification**,  
apples, volatiles, chromatography (gas) 190.  
beer, volatiles, sulphur compounds 1608.  
chemotaxis, ACDAS 289.  
coffee, ageing 293.  
coffee, off flavour, 2-methylfuran/2-butanone 261.  
glycoalkaloids, potatoes, bitterness 1037.  
lavender/lavandin/spike lavender, essential oils, aroma  
compounds 1038.  
lemon, essential oils, benzyl alcohol 1610.  
lemon, essential oils, citral 1611.  
leucocytes (neutrophilic), chemotaxis 290.  
milk products/yoghurt, volatiles 183.  
off odours, water supplies 240.  
pheromones, insects, acetates, evaporation 809.  
pigs-housing, odour pollution 1536.  
shrimps, off flavours/off odours, ammonia 1605.  
sinapine, Brassica napus/Brassica campestris seeds 294.  
strawberries, flavourings, methyl cinnamate/ $\gamma$ -decalactone/  
maltol 1606.  
taste threshold 17.  
taste thresholds 18.
- tobacco, formic acid/acetic acid 1612.  
wine, aroma compounds 1607.
- Queens**,  
Apis mellifera, pheromones 1302.  
Monomorium pharaonis, reproductive behaviour,  
pheromones 68.
- Quince**,  
flavour compounds, ethyl-2-methyl-2-butenolate 189.
- Quinine**,  
Drosophila melanogaster-mutants, genetics 799.  
rats, food intake 167.
- Rabbits**,  
immunoglobulin G, chemotactic factors 45.  
leucocytes (neutrophilic), chemotactic factors receptors 1182.  
leucocytes (neutrophilic), chemotactic factors, response 1183.  
leucocytes (neutrophilic), chemotaxis 1175.  
leucocytes (polymorphonuclear), chemotactic factors,  
structure-activity relationships 1194.  
leucocytes (polymorphonuclear), chemotaxis, Bacteroides  
fragilis-lipopolysaccharides, antibodies-effects on 731.  
taste perception, brachium conjunctivum 1067.
- Radiation ( $\gamma$ )**,  
Ceratitis capitata, reproductive behaviour, pheromones 75.  
onion powder 993.  
rats, sodium appetite 922.
- Radiation (u.v.)**,  
Volvox carteri, pheromones 1041.
- Radiation (X)**,  
rats, taste aversion learning 1377.
- Raisins**,  
drying, temperature effects 1545.
- off flavours, methyl oleate/ethyl oleate-effects on 250.
- Raja clavata**,  
electric organs, salinity effects 1055.
- Ramosia rileyana**,  
Synanthedon pictipes, interspecific hybridization,  
pheromones 1251.
- Rana japonica**,  
oral cavities, premetamorphic papillae 1140.
- Rana ridibunda**,  
olfactory cells, electrical stimulation-effects on 1056.  
olfactory cells, odour stimuli-effects on 1057.
- Rana spp.**,  
see **Frogs**
- Rancidity**,  
beef/turkey, storage effects 1568.  
oils/fats, phospholipids-effects on 251.  
pork, organoleptic evaluation, pentane-production 1569.  
sardines, storage effects 1009.
- Rangifer tarandus**,  
interdigital glands secretions, seasonal variations 1434.  
interdigital glands secretions, volatiles, 1-hydroxy-7-methyl-3-  
octanone/7-methyl-1-octen-3-one 177.  
preorbital glands, volatiles, 4-heptanone/2-methyl-4-  
heptanone 894.  
social behaviour, chemical communication 895.

**Rapeseed diets,**

chickens, taste panel evaluation 1587, 1588.

eggs, off odours 242.

horses, food intake 1420.

**Rats,**

aggressive behaviour, olfactory tubercle, atropine 940.

aversion learning, barbiturates-effects on 1390.

aversion learning, olfactory stimuli 1380.

avoidance behaviour, learning 176.

avoidance learning, septum/amygdala/caudate nucleus/  
nucleus accumbens/olfactory tubercle lesions-effects on 904.  
behaviour/11-hydroxycorticosterone activity, bulbectomy-  
effects on 1123.

blood pressure/heart rate, bulbectomy-effects on 1126.

brain, 2-deoxyglucose-uptake, neocortex/hypocampus  
lesions-effects on 1121.

bulbectomy, avoidance learning, psychoactive drugs-effects  
on 156.

carotid body, tyrosine hydroxylase-activity 1143.

conditioning, taste preferences 157.

decerebration, methodology 288.

drinking behaviour, lithium-effects on 1401.

EEG, bulbectomy-effects on 1131.

ethanol intake, shock-effects on 1402.

feeding behaviour, conspecifics, aversion 1409.

feeding behaviour, hypothalamus (ventromedial) lesions-  
effects on 1404.

feeding behaviour/drinking behaviour, hypothalamus (lateral)  
lesions-effects on 923.

feeding behaviour/drinking behaviour, hypothalamus (lateral)  
lesions-recovery of function, bulbectomy-effects on 1405.

food intake, insulin/tolbutamide-effects on  $9^{\circ} \pm 9^{\circ}$  924.

food intake, quinine/acetic acid/butyric acid/citric acid-  
effects on 167.

food intake/taste aversion learning, hypothalamus  
(ventromedial) lesions-effects on 164.

food preferences, bitterness/sourness, weaning experience-  
effects on 165.

food preferences, development 934.

food preferences, learning, mother-offspring interactions/  
social interactions 876.

food selection, chlordiazepoxide-effects on 1410.

food selection, early experience-effects on 1406.

huddling, ontogeny 149.

latent learning 1385.

leucocytes (polymorphonuclear), chemotaxis, cholera toxin-  
effects on 52.

leucocytes (polymorphonuclear), chemotaxis inhibition,  
inflammation-relationship 727.

leucocytes (polymorphonuclear), chemotaxis, benoxaprufen-  
effects on 728.

leucocytes (polymorphonuclear), chemotaxis, inflammation  
1193.

macrophages, chemotaxis, *Listeria monocytogenes*,  
chemotactic factors 1171.

maternal behaviour 877.

maternal behaviour, anosmia-effects on 875.

maternal behaviour, pheromones, bile 1345.

maze learning, olfactory stimuli 162.

metabolism, glycyrrhizin-effects on 1040.

nesting behaviour, olfactory preferences 1344.

odour aversion learning 1383.

olfactory bulb, apomorphine-content 1128.

olfactory bulb, DNA biosynthesis 1132.

olfactory bulb, dopamine, aggressive behaviour 1129.

olfactory bulb, mitral cells activity, oestrus-effects on 1334.

olfactory bulb, noradrenaline-content, castration-effects on  
706.

olfactory bulb, odour perception, spatial patterns 31.

olfactory bulbs, choline acetyltransferase/  
acetylcholinesterase-activities 1133.

olfactory bulbs, 2-deoxy-D-glucose-uptake 1125.

olfactory bulbs, oestrus-effects on 32.

olfactory bulbs-development, anosmia-effects on 707.

olfactory cortex, pentobarbitone-effects on 1130.

olfactory cortex, transduction mechanisms, aspartate 671.

olfactory discrimination, brain lesions/bulbectomy-effects on  
1392.

olfactory discrimination, lateral olfactory tract lesions-effects  
on 1393.

olfactory discrimination learning 910.

olfactory epithelium, camphor receptors 705.

olfactory preferences, bioassays 1030.

olfactory preferences, early experience, sex differences 1343.

olfactory tubercle, adenylate cyclase-content 708.

olfactory tubercle, glutamic decarboxylase activities,  
bulbectomy-effects on 1127.

olfactory tubercle, tyrosine hydroxylase activities,  
bulbectomy-effects on 1122.

olfactory tubercles, choline acetyltransferase/glutamic acid  
decarboxylase-activities, bulbectomy-effects on 1124.

predatory aggression, bulbectomy, psychotropic drugs-  
effects on 1431.

predatory aggression, olfactory bulb, monoamines-  
metabolism 939.

prolactin, bulbectomy-effects on 298.

reproductive behaviour 871.

reproductive behaviour, urine odours-response, castration-  
effects on 1336.

reproductive behaviour/markings behaviour-relationship 869.

reproductive behaviour/markings behaviour-sexual behaviour  
870.

respiration, arterial chemoreceptors lesions-effects on 713.

scavenging behaviour, food preferences, conspecifics odours-  
effects on 166.

sex hormones, anosmia-effects on 1335.

sleep and wakefulness, bulbectomy-effects on 1433.

sleep and wakefulness, olfactory stimuli-effects on 1432.



**Rats,(continued)**

social behaviour 890.  
sodium appetite 925.  
sodium appetite, diphenylhydantoin-effects on 926.  
sodium appetite, nerve growth factor-effects on 1403.  
sodium appetite, radiation ( $\gamma$ )-effects on 922.  
sodium appetite, water deprivation-effects on 1413.  
  
taste aversion learning 161.  
  
taste aversion learning 1389.  
taste aversion learning, anaesthesia/ECS-effects on 1384.  
  
taste aversion learning, blood-biochemistry 159.  
  
taste aversion learning, cocaine analogues-effects on 1370.  
taste aversion learning, cocaine-effects on 913.  
taste aversion learning, CS experience 900.  
taste aversion learning, CS experience disruption 899.  
taste aversion learning, delayed reinforcement 1373.  
taste aversion learning, development 1382.  
taste aversion learning, environmental effects 1381.  
taste aversion learning, ESB-amygdala/hypothalamus (lateral) 909.  
taste aversion learning, ethanol dependence-effects on 911.  
taste aversion learning, ethanol-effects on 912.  
taste aversion learning, extinction 903.  
taste aversion learning, fluid intake, naloxone-effects on 1371.  
taste aversion learning, hippocampus lesions-effects on 901.  
taste aversion learning, hydrochlorothiazide/methyl dopa-effects on 908.  
taste aversion learning, iron deficiency-effects on 1391.  
taste aversion learning, lead/triethyl tin-effects on 1376.  
taste aversion learning, lithium-effects on 1374.  
taste aversion learning, memory, ouabain-effects on 905.  
  
taste aversion learning, morphine self-administration-effects on 158.  
  
taste aversion learning, naloxone-effects on 902.  
taste aversion learning, neocortex ablation-effects on 907.  
taste aversion learning, novelty-effects on 1375.  
taste aversion learning, pentylenetetrazol-effects on 1379.  
taste aversion learning, radiation (X)-effects on 1377.  
  
taste aversion learning, saccharin, novelty 160.  
  
taste aversion learning, sex hormones-effects on 1387.  
taste aversion learning, transfer 1386.  
taste aversion learning, transfer, food/water deprivation 1372.  
  
taste aversion learning, 2,4,5-trichlorophenoxyacetic acid-effects on 155.  
  
taste aversion learning, UCS experience 1378.  
taste aversion learning, Vipera russellii venom-effects on 914.  
taste aversion learning/odour aversion learning, UCS-lithium 1388.  
  
taste buds, regeneration, alkaline phosphatase 36.  
taste buds, siallectomy-effects on 37.  
taste cells, sodium salts/potassium salts-effects on, taste perception, models 1066.  
taste perception, sweetness, thaumatin 1415.  
taste preferences 1407.  
taste preferences, chili pepper 1408.  
taste preferences, conditioning 921.

taste preferences, hypothalamus-stimulation-effects on 1411.  
taste preferences, sweetness, ovariectomy-effects on 1414.  
taste preferences, taste aversion learning, 2-deoxy-D-glucose/saccharin/insulin-effects on 906.  
taste preferences, water deprivation-effects on 1412.

taste preferences, zinc deficiency-effects on 163.

tongues, fungiform papillae 1141.

**Rattlesnakes,**

predatory behaviour 919.

**Rebaudioside A,**

Stevia rebaudiana, sweeteners 1509.

**Receptors,**

sweetness, taste intensities, time-effects on 1061.  
vertebrates, olfactory perception, sensory transduction 1048.

**Recruitment,**

Aphaenogaster subterranea, foraging behaviour 794.

Leptothorax, pheromones 135.

Myrmica rubra, trail following behaviour 102.

**Rectal glands,**

Dacus tryoni/Dacus neohumeralis, pheromones 766.

**Reflexes,**

dogs, chemoreceptors, baroreceptors-effects on 1072.

**Regeneration,**

Ictalurus, taste buds 35.

mice, olfactory bulbs 28.

squirrel monkeys, olfactory epithelium 1137.

**Reindeer,**

interdigital glands secretions, seasonal variations 1434.

interdigital glands secretions, volatiles, 1-hydroxy-7-methyl-3-octanone/7-methyl-1-octen-3-one 177.

preorbital glands, volatiles, 4-heptanone/2-methyl-4-heptanone 894.

social behaviour, chemical communication 895.

**Repellents,**

Aedes aegypti, lactic acid derivatives 1277.

Culex fasciatus/Culex pipiens 1278.

Culex tarsalis/Culex pipiens quinquefasciatus, oviposition 1236.

Delia brassicae, naphthalene 1280.

Dictyostelium/Polysphondylium, chemotaxis-negative 750.

Myzus persicae, larviposition, structure-activity relationships 137.

Spodoptera litura, oviposition, Melia azadirachta extracts 1295.

Termitidae, Formicidae 146.

Tribolium confusum, amides 123.

**Reproductive behaviour,**

see **Oviposition**

Acrolepia alliella, pheromones, (Z)-11-hexadecenyl acetate/(Z)-11-hexadecenol 70.

Andrena, pheromones 71.

Andrena, pheromones 760.

**Reproductive behaviour, (continued)**

*Apanteles glomeratus*, pheromones 73.

*Betta splendens*/*Macropodus opercularis*/*Colisa labiosa*/  
*Colisa lalia*/*Trichogaster trichopterus* 1326.

*Blattella germanica*, orientation 761.

*Ceratitis capitata*, pheromones, radiation ( $\gamma$ )-effects on 75.  
*Cheloderus childreni* 76.

*Chilo suppressalis*, pheromones-effects on 1232.

*Choristoneura fumiferana*, pheromones, attraction/disruption 765.

*Choristoneura fumiferana*, pheromones 762.

*Choristoneura fumiferana*, pheromones-effects on 763.

*Chrysemys picta* 864.

*Coelotes terrestris*, maze equipment 1031.

*Colias*, pheromones 1234.

*Colias eurytheme*/*Colias philodice*, pheromones 1233.

*Colletes validus*, pheromones 79.

*Dermestes maculatus*, pheromones 767.

*Diprion pini*/*Neodiprion sertifer* 768.

*Drosophila melanogaster*, pheromones 769, 770.

*Emerita asiatica* 788.

*Ephestia cautella*, pheromones 1238.

*Grapholitha molesta*, pheromones 772.

hamsters, dimethyl disulphide/dimethyl trisulphide-responses 867.

hamsters, oestrus cycle 868.

hamsters, vomeronasal organs-role 1332.

*Hedya nubiferana* pheromones, (E)-8,10-dodecadienyl  
acetate/(Z)-8-dodecenyl acetate 1223.

*Heliothis virescens*, pheromones 1243.

*Holopterus chilensis* 76.

*Homarus americanus*, pheromones 1256.

*Hyalophora cecropia*, pheromones 773.

impala 896.

*Ips*, pheromones 1245.

*Keiferia lycopersicella*, pheromones 1247.

*Mamestra brassicae*, pheromones, (Z)-11-hexadecenyl  
acetate/(Z)-11-hetadecenyl acetate-synthesis 1225.

mammals, olfactory stimuli, review 67.

*Metaseiulus occidentalis*, pheromones 1250.

mice, histocompatibility genes-effects on, genetics 1331.

mice, pheromones-effects on 1329.

*Monomorium pharaonis*, queens, pheromones 68.

*Nauphoeta cinerea*, mate selection 777.

*Nauphoeta cinerea*, pheromones 776.

*Idaematoporus monodactylus*, attractants, (Z)-9-  
dodecenal 1224.

*Pandemis heparana*, pheromones 86.

*Panorpa*, pheromones 779.

*Phthorimaea operculella*, pheromones 782.

pigs, bulbectomy-effects on 1337.

Prays oleae, pheromones, Z-7-tetradecen-1-al,  
electroantennograms 91.

Prays oleae, pheromones, (Z)-7-tetradecenal 90.

*Procamburus clarkii*, pheromones 789.

*Pseudaletia unipuncta*, pheromones 783.

rats 871.

rats, marking behaviour-relationship 869.

rats, marking behaviour-sexual behaviour 870.

rats, urine odours-response, castration-effects on 1336.

*Sorex isodon* 865.

*Spodoptera frugiperda*, pheromones 786.

*Streptococcus faecalis*, pheromones 299.

*Tetranychus urticae*, pheromones, citronellol 1252.

*Thamnophis sirtalis* 1327.

**Reproductive isolation,**

*Euroleon nostras*/*Grocus bore*/*Myrmeleon formicarius*,  
pheromones, nerol 1239.

*Hemileuca*, pheromones 1244.

*Trichinella*, pheromones 1258.

**Respiration,**

cats, aortic body/carotid body 1070.

cats, medullary chemoreceptors, temperature effects 40.

rats, arterial chemoreceptors lesions-effects on 713.

turtles, pulmonary chemoreceptors, carbon dioxide-effects on 39.

**Restructuring,**

pork, organoleptic evaluation 998.

**Rhabditis oxyerca,**

attractants 757.

**Rhizobium,**

chemotaxis 1213.

**Rhizobium meliloti,**

chemotaxis, genetics 1212.

**Rhodopseudomonas sphaeroides,**

chemotaxis 54.

chemotaxis, membrane potential 1214.

**Rhyacionia buoliana,**

traps baits, pheromones 1293.

**Rhyacionia subtropica,**

traps baits, pheromones, (E)-9-dodecenyl acetate 833.

**Riazocoris nigra,**

scent gland, morphology 1318.

**Ribose-binding protein,**

*Escherichia coli*, chemotaxis 55.

**Rice,**

koji, volatiles 187.

off flavour, lipoxygenase-effects on 1558.

olfactory properties, genetics 1042.

volatiles,  $\alpha$ -pyrrolidone 1454.

**Ripening,**

hops, bitterness 210.

**Roe deer,**

chemical communication 1362.

grazing, olfactory perception 1436.

**Rosa damascena,**

$\beta$ -damascenone-synthesis 205.

**Rostral chemoreceptors,**

*Lygus lineolaris*, feeding behaviour 13.

- Rum**,  
aroma compounds, damascenone 1480.
- Running**,  
*Megaselia scalaris*/*Puliciphora borinquensis*, chemoreception behaviour 856.
- Rye bread**,  
taste panel evaluation 1578.
- Saccharin**,  
man, taste perception, bitterness 694.  
rats, taste aversion learning, novelty 160.  
rats, taste preferences, taste aversion learning 906.  
temperature effects, vitamins/amino-acids 971.
- Saccharomyces cerevisiae**,  
killer factor, beer, off odour 1571.  
pheromones, mating types 1625.
- Sage**,  
*Salvia triloba*/*Salvia officinalis*, volatiles 226.
- Saimiri sciureus**,  
aversion learning, orientation disruption-effects on 915.  
marking behaviour 1365.  
olfactory bulb-regeneration, olfactory nerves lesions-effects on 1138.
- Sake**,  
off flavours, dimethyl sulphide 264.
- Salamandra salamandra**,  
homing behaviour 1426.
- Salinity effects**,  
*Raja clavata*/*Trigon pastinaca*, electric organs 1055.
- Saliva**,  
man, taste thresholds, sweetness/bitterness, content-effects on 683.
- Saliva flow**,  
man, olfactory perception-effects on 22.
- Saliva odours**,  
mice, social behaviour 1352.
- Salix**,  
*Phyllodecta laticollis*, host preference 103.
- Salmo alpinus**,  
pheromones, fractionation 1603.
- Salmo gairdneri**,  
organoleptic evaluation, herbicides-effects on 1565.  
oxygen receptors, anaesthetics-effects on 1142.
- Salmon**,  
aroma compounds, smoking-effects on 1471.  
flavour compounds, smoking-effects on 1472.
- Salmonella typhimurium**,  
chemotaxis, cell permeability 291.  
chemotaxis, electron transport-role 742.  
chemotaxis, galactose receptors 747.  
chemotaxis, genetics 56.  
chemotaxis, metals-citrate complex-effects on 748.  
chemotaxis, proteins modification reagents effects on 1215.  
chemotaxis, tumbling 59.
- Saltiness**,  
man, taste thresholds, adaptations, review 1083.  
man, taste thresholds, age-effects on 690.  
taste intensity, man 1080.
- Salvia officinalis**,  
volatiles 226.
- Salvia triloba**,  
volatiles 226.
- Sampling**,  
odour pollution 988.
- Sandalwood**,  
essential oils, ( $\pm$ )- $\beta$ -santalene/( $\pm$ )- $\beta$ -santalol-synthesis 207.  
essential oils, santalol-synthesis 1497.
- Sanguinus fuscicollis**,  
marking behaviour, secretions, volatiles 946.
- ( $\pm$ )- $\beta$ -Santalene**,  
sandalwood, essential oils, synthesis 207.
- Santalol**,  
*Santalum album*, essential oils, synthesis 1497.
- ( $\pm$ )- $\beta$ -Santalol**,  
sandalwood, essential oils, synthesis 207.
- Santalum album**,  
essential oils, santalol-synthesis 1497.
- Saponins**,  
*Acanthaster planci*, defence mechanisms 916.
- Sarcoidosis**,  
man, monocytes, chemotaxis, Kveim antigen-effects on 721.
- Sarcophaga bullata**,  
pheromones, hexanal 92.
- Sardines**,  
rancidity, storage effects 1009.  
volatiles, off odour 1564.
- Satiety**,  
taste perception, review 1395.
- Satsuma juice**,  
taste panel evaluation 1581.
- Sauria**,  
chemical perception, evolution 933.  
taste buds 712.
- Sausage**,  
organoleptic evaluation, starter cultures-effects on 278.  
fish, organoleptic evaluation, mutton fat-effects on 237.  
organoleptic evaluation, *Paecilomyces varioti*-effects on 1546.  
smoke flavourings, flavour compounds 192.  
taste panel evaluation, pork 1589.
- Scavenging behaviour**,  
rats, food preferences, conspecifics odours-effects on 166.
- Sceliphron caementarium**,  
head secretions, geranyl acetate/2-decen-1-ol 143.
- Sceloporus occidentalis**,  
chemical communication 883.
- Scent gland**,  
*Blastoceros bezoarticus* 1437.
- Dysdercus intermedius**, linalool 206.
- Riazocoris nigra**, morphology 1318.
- Scent marking behaviour**,  
see **Marking behaviour**
- Schistocerca gregaria**,  
feeding deterrents, *Hymenocallis littoralis*, alkaloids 1267.  
maxillary palp chemoreceptors, feeding behaviour 12.
- Schistosoma mansoni**,  
chemokinesis 66.  
leucocytes-mice, chemotaxis 1180.
- Schizaphis graminum**,  
phagodetrants, zanthophylline 792.
- Schizosaccharomyces pombe**,  
wine, off flavours 265.



- Sciurus aberti**,  
feeding behaviour 927.
- Sclerotinia sclerotiorum**,  
caraway/anise/coriander/fennel/dill, essential oils 1518.
- Sclytus multistriatus**,  
traps baits, pheromones 835.
- Scolytidae**,  
olfactory perception, pheromones receptors, review 668.  
phagostimulants, terpenoids 1268.
- Scolytus multistriatus**,  
pheromones, (+)-(3R,4R)-4-methyl-3-heptanol-synthesis 1447.  
pheromones, Multilure, responses 144.  
traps baits, pheromones 834.
- Scotogramma trifolii**,  
attractants, (Z)-11-hexadecenyl acetate 1443.
- Scylla serata**,  
feeding behaviour 1274.
- Secretions**,  
Sanguinus fuscicollis, marking behaviour, volatiles 946.
- Selatosomus latus**,  
pheromones, secretion 784.
- Sensilla styloconica chemoreceptors**,  
Yponomeuta 14.
- Sensory evaluation**,  
see **Organoleptic evaluation and Taste panel evaluation**
- Sensory transduction**,  
vertebrates, olfactory perception, receptors 1048.
- Separation techniques**,  
flavour compounds 1036.
- Sepsidae**,  
swarming behaviour/anti-predator behaviour 145.
- Sepsis**,  
man, leucocytes (polymorphonuclear), chemotaxis 25.
- Septum**,  
mice, noradrenaline/dopamine, aggressive behaviour-effects on 1118.
- Septum lesions**,  
rats, avoidance learning 904.
- Serotonin**,  
guinea pigs, olfactory cortex, AMP (cyclic) 30.
- Serpentes**,  
chemical perception, evolution 933.
- Serum**,  
leucocytes (polymorphonuclear)-man, chemotaxis 1196.
- Serum enhancing factor**,  
leucocytes (eosinophilic)-man, chemotaxis 717.
- Sesamia cretica**,  
attractants, pheromones 1294.
- Sesiidae**,  
attractants, 3,13-octadecadien-1-ol acetates, synthesis 944.
- Sex differences**,  
hamsters/rats, olfactory preferences, early experience 1343.
- Sex hormones**,  
rats, anosmia-effects on 1335.  
rats, taste aversion learning 1387.  
sheep, bulbectomy-effects on 709.
- Sexual behaviour**,  
see **Reproductive behaviour**
- Shampoo**,  
fragrances 228.
- Sheep**,  
epiglottis, taste buds, development 1136.  
feeding behaviour, early experience-effects on 929.  
olfactory epithelium 1135.  
sex hormones-production, bulbectomy-effects on 709.  
taste buds, taste stimuli-response, development 1068.
- Sheep meat**,  
taste panel evaluation, facial eczema-effects on 1021.
- Shock**,  
rats, ethanol intake 1402.
- Shrimps**,  
off flavours/off odours, ammonia, quantification 1605.
- Sialectomy**,  
rats, taste buds 37.
- Sigmodon hispidus**,  
aversion learning, olfactory stimuli 1380.
- Sinapine**,  
Brassica napus/Brassica campestris seeds, quantification 294.
- Site selection**,  
Anastrepha suspensa, oviposition 1229.
- Sitotroga cerealella**,  
traps baits, pheromones 120.
- Skin**,  
fish, mucilage, collection 1604.
- Skin chemoreceptors**,  
carp, tectum opticum 672.
- Skin diseases**,  
Propionibacterium acnes/Propionibacterium granulosum/  
Staphylococcus epidermidis, chemotactic factors, man 1153.
- Sleep and wakefulness**,  
rats, bulbectomy-effects on 1433.  
rats, olfactory stimuli-effects on 1432.
- Smoke**,  
flavourings, flavour compounds 181.
- generator, flavour compounds 1613.
- sausages, flavour compounds 192.
- salmon, aroma compounds 1471.  
salmon, flavour compounds 1472.
- Soaps**,  
essential oils/fragrances, antimicrobial activity 982.
- Social behaviour**,  
Apis cerana, queens-pheromones 842.  
cattle, bulbectomy-effects on 1364.  
Ictalurus nebulosus 1347.  
impala 896.  
mice, saliva odours-effects on 1352.  
rats 890.  
reindeer, chemical communication 895.  
Stegodyphus sarasinorum, maze equipment 1031.  
Trichechus manatus 1435.
- Social environment**,  
mice, olfactory bulb, glutamate decarboxylase 1117.  
mice, parental behaviour 1342.  
mice, pituitary-adrenal system 887.
- Social interactions**,  
mice 886.  
rats, learning, food preferences 876.
- Sodium**,  
hepatic chemoreceptors, osmoregulation 1069.
- Sodium appetite**,  
rats 925.  
rats, nerve growth factor-effects on 1403.  
rats, radiation ( $\gamma$ )-effects on 922.  
rats, water deprivation-effects on 1413.  
rats/gerbils/hamsters, diphenylhydantoin-effects on 926.  
thirst, book 1626.
- Sodium cyclamate**,  
temperature effects, vitamins/amino-acids 971.
- Sodium salts**,  
rats, taste cells, taste perception, models 1066.

- Sodium salts,(continued)**  
taste quality, man 1081.
- Soft drinks,**  
taste panel evaluation, aspartame-effects on 284.
- Solanum tuberosum,**  
volatiles, *Leptinotarsa decemlineata*-responses 204.
- Solenopsis,**  
trail following behaviour, pheromones 1319.
- Sorbitol,**  
sweeteners, legislation 1618.
- Sorex isodon,**  
reproductive behaviour 865.
- Sound production,**  
*Dendroctonus pseudotsugae*, pheromones, geographical variations 845.
- Sourness,**  
man, taste papillae, taste perception, cross-enhancement 16.  
orange juice, organoleptic evaluation 1015.  
rats, food preferences, weaning experience-effects on 165.
- Soya curd,**  
organoleptic evaluation, calcium-effects on 1584.
- Soya protein,**  
beef loaves, organoleptic evaluation 1026.  
beef patties, organoleptic evaluation 282.  
ham, taste panel evaluation 1027.  
volatiles, lactones 961.
- Soya sauce,**  
aroma compounds, organoleptic evaluation 957, 958, 959.  
flavour compounds, 4-hydroxy-2-ethyl-5-methyl-3(2H)-furanone 1468.  
volatiles 1469.
- Soybeans,**  
off flavour, freezing-effects on 1562.  
off flavours, aldehyde dehydrogenase-effects on 1006, 1007.  
flavour compounds, bitterness, 9,12,13-trihydroxyoctadeca-10-enoic acid/9,10,13-trihydroxyoctadeca-11-enoic acid 191.  
proteins hydrolysates, bitterness 1563.
- Soycakes,**  
volatiles 1469.
- Spatial patterns,**  
rats, olfactory bulb, odour perception 31.
- Spike lavender,**  
essential oils. aroma compounds, quantification 1038.
- Spodoptera frugiperda,**  
food selection, carbaryl-effects on 105.  
reproductive behaviour, pheromones 786.  
traps baits, pheromones 1297.  
traps baits, pheromones, (S)-9-tetradecen-1-ol acetate 785.
- Spodoptera littoralis,**  
pest control, pheromones 1296.
- Spodoptera litura,**  
oviposition, repellents, *Melia azadirachta* extracts 1295.  
pheromones inhibitors, (Z)-9-tetradecenyl acetate 122.
- Spodoptera ornithogalli,**  
feeding behaviour, atranorin/vulpinic acid-effects on 1269.
- Squirrel monkey,**  
marking behaviour 1365.  
olfactory epithelium, regeneration 1137.
- Stale flavours,**  
beer, taste panel evaluation, graphic linear scaling 266.
- Staphylococcus aureus,**  
chemotactic factors-induction 735.  
leucocytes (granulocytic)-man, chemotaxis 1163.  
leucocytes (polymorphonuclear)-man, chemotaxis, chemotactic factors 1158.
- Staphylococcus aureus furunculosis,**  
man, leucocytes (neutrophilic), chemotaxis 1185.
- Staphylococcus epidermidis,**  
chemotactic factors, man, skin diseases 1153.
- Starter cultures,**  
sausage, organoleptic evaluation 278.
- Starvation,**  
cod, off flavours, storage effects 254.
- Steaming,**  
pecans 1544.
- Stegobium paniceum,**  
pheromones, 2,3-dihydro-2,3,5-trimethyl-6-(1-methyl-2-oxobut 787.
- Stegodyphus sarasinorum,**  
social behaviour, maze equipment 1031.
- Stenella coerulocalba,**  
tongue, taste buds 38.
- Sternal gland,**  
Postelectrotermes nayari, trail following behaviour, pheromones glands 861.
- Stevia rebaudiana,**  
sweeteners, stevioside/rebaudioside A 1509.
- Stevioside,**  
*Stevia rebaudiana*, sweeteners 1509.
- Stevioside analogues,**  
sweeteners, synthesis 970.
- Stichodactyla haddoni,**  
feeding behaviour, nematocytes 807.
- Stongylocentrotus franciscanus,**  
anti-predator behaviour, *Pycnopodia helianthoides* 1273.
- Stongylocentrotus purpuratus,**  
anti-predator behaviour, *Pycnopodia helianthoides* 1273.
- Storage effects,**  
beans, carbon dioxide-effects on 995.  
beef, taste panel evaluation 1586.  
beef/turkey, rancidity 1568.  
broccoli, off flavours/off odours, carbon dioxide-effects on 1559.  
Brussel sprouts 236.  
Catostomidae 1010.  
cloves, off flavour, essential oils 1005.  
cod, off flavours, starvation-effects on 254.  
coffee, aroma compounds 197.  
coffee, effects-oxygen 239.  
coffee, organoleptic evaluation 283.  
*Coryphaenoides acrolepis*, organoleptic evaluation 1020.  
dates, off flavours 1001.  
hops, aroma compounds 199.

**Storage effects, (continued)**

leucocytes (granulocytic)-man, chemotaxis, ATP-role 1162.  
 leucocytes (neutrophilic)-man, chemotaxis 1187.  
 milk-ultrahigh temperature, taste panel evaluation 1575.  
 mussels 1548.  
 peaches, flavour compounds 1465.  
 peanuts/pecans, packaging-effects on 1543.  
 potatoes, taste panel evaluation 277.  
 sardines, rancidity 1009.  
 vegetables-dried, off flavour, models 1561.  
**Strawberries,**  
 flavourings, methyl cinnamate/ $\gamma$ -decalactone/maltol-  
 quantification 1606.  
 organoleptic evaluation, aroma compounds 1582.  
**Streptococcus faecalis,**  
 reproductive behaviour, pheromones 299.  
**Streptomyces,**  
 water supplies, off odours 241.  
**Structure-activity relationship,**  
 bitter peptides, amino acids 1516.  
 alcohols, frog, olfactory epithelium, electro-olfactograms 670.  
 aldoximes, sweetness/bitterness 1515.  
 leucocytes (polymorphonuclear)-rabbits, chemotactic factors  
 1194.  
 lipids/carbohydrates, bitterness, hydrophobicity 975.  
*Myzus persicae*, repellents, larviposition 137.  
 olfactory perception 1501.  
 sweetness, review 213.  
**Substantia innominata,**  
 cats, amygdala, stimulation-effects on 1059.  
**Substantia nigra,**  
 mice, noradrenaline/dopamine, aggressive behaviour-effects  
 on 1118.  
**Sucking behaviour,**  
 man-neonates 172.  
**Sucrose,**  
 sweeteners 233.  
 sweeteners, charcoal (activated) 297.  
 taste intensities, sweetness 268.  
**Sugar (raw),**  
 sweeteners 233.  
**Sugar factory,**  
 odour pollution, legislation 232.  
**Sugar processing,**  
 odour pollution 987.  
**Sulphur chemicals,**  
*Delia antiqua*, attractants 113.  
**Sulphur compounds,**  
 beer, volatiles 1478.  
 beer, volatiles, quantification 1608.  
 Cheddar cheese, flavour compounds 185.  
 cheese, aroma compounds 951.  
 chickens, flavour compounds 193.  
 meat, flavour compounds 1474.  
**Sulphur dioxide,**  
 wine 1553.

**Sunflowers,**

proteins, phenolic compounds 1547.

**Swallowing reflex,**

cats, basal fore brain-role 33.

**Swarming behaviour,**

*Apis mellifera*, pheromones-effects on 841.

Sepsidae, anti-predator behaviour 145.

**Sweet corn,**

organoleptic evaluation, genetics 1019.

**Sweeteners,**

aspartame, soft drinks, taste panel evaluation 284.

aspartame, toxicity 1620.

aspartame analogues-synthesis 1504.

glucose/fructose/sugar (raw)/sucrose 233.

ice cream 1540.

legislation, fructose/sorbitol/mannitol/xylitol 1618.

6-methyltryptophan synthesis 1505.

nutritive, review 234.

oxathiazinone dioxides, synthesis 1508.

oximes, synthesis 1506.

saccharin/sodium cyclamate, temperature effects, vitamins/  
 amino-acids 971.

*Stevia rebaudiana*, stevioside/rebaudioside A 1509.

stevioside analogues, synthesis 970.

sucrose, charcoal (activated) 297.

taste preferences, primates 930.

thaumatin I, amino acid sequence 208.

thiophenesaccharin, synthesis 1510.

**Sweetness,**

aldoximes, structure-activity relationships 1515.

lactulose, taste intensities 19.

man, taste perception, bitterness-mixtures 15.

man, taste perception mechanisms, taste intensities 1082.

man, taste thresholds, saliva content-effects on 683.

orange juice, organoleptic evaluation 1015.

rat, taste perception, thaumatin 1415.

rats, taste preferences, ovariectomy-effects on 1414.

receptors, taste intensities, time-effects on 1061.

structure-activity relationships, review 213.

sucrose/fructose, taste intensities 268.

taste intensity, man 1080.

taste thresholds, man, dental caries-relationship 23.

**Swertiae,**

bitter principle, chromatography (liquid) 1511.

**Swimming behaviour,**

*Paramecium aurelia*, chemotaxis 65.

**Swormlure,**

*Cochliomyia hominivorax*, attractants 814.

**Sylvian gyri,**

cats, amygdala, stimulation-effects on 1059.

**Synanthedon exitiosa,**

pheromones-synthesis 1448.



**Synanthedon pictipes,**

pheromones-synthesis 1448.

Ramosia rileyana, interspecific hybridization, pheromones 1251.

**Systemic lupus erythematosus,**

man, chemotactic defects 1088.

**Syzygium aromaticum,**

phenolic compounds 1628.

**Taints,**

cereals, coupon inserts-effects on 246.

eggs, hens, trimethyl oxidase-activity 243.

mullet, oil pollution-effects on 1008.

**Tannins,**

wine, harvesting-effects on 999.

**Tarsal chemoreceptors,**

Delia brassicae, host searching behaviour, oviposition 3.

**Taste,**

terminology 1078.

**Taste aversion learning,**

Carollia perspicillata 1394.

chickens, food preferences 153.

drugs-effects on, review 898.

hamsters, nucleus tractus solitarius/parabranchial pons, taste stimuli-effects on, correlation 673.

mice, genetics 1369.

mice, lithium-induced 154.

rats 161.

rats 1389.

rats, anaesthesia/ECS-effects on 1384.

rats, blood-biochemistry 159.

rats, cocaine analogues-effects on 1370.

rats, cocaine-effects on 913.

rats, CS experience 900.

rats, CS experience disruption 899.

rats, delayed reinforcement 1373.

rats, development 1382.

rats, environmental effects 1381.

rats, ESB-amygdala/hypothalamus (lateral) 909.

rats, ethanol dependence-effects on 911.

rats, ethanol-effects on 912.

rats, extinction 903.

rats, fluid intake, naloxone-effects on 1371.

rats, hippocampus lesions-effects on 901.

rats, hydrochlorothiazide/methyl dopa-effects on 908.

rats, hypothalamus (ventromedial) lesions-effects on 164.

rats, iron deficiency-effects on 1391.

rats, lead/triethyl tin-effects on 1376.

rats, lithium-effects on 1374.

rats, memory, ouabain-effects on 905.

rats, morphine self-administration-effects on 158.

rats, naloxone-effects on 902.

rats, neocortex ablation-effects on 907.

rats, novelty-effects on 1375.

rats, pentylenetetrazol-effects on 1379.

rats, radiation (X)-effects on 1377.

rats, saccharin, novelty 160.

rats, sex hormones-effects on 1387.

rats, taste preferences, 2-deoxy-D-glucose/saccharin/insulin-effects on 906.

rats, transfer 1386.

rats, transfer, food/water deprivation 1372.

rats, 2,4,5-trichlorophenoxyacetic acid-effects on 155.

rats, UCS experience 1378.

rats, UCS-lithium 1388.

rats, Vipera russellii venom-effects on 914.

**Taste buds,**

Cirrhinus mrigala, palate 711.

Cirrhinus mrigala, palates 710.

Ictalurus, regeneration 35.

man, anatomy 1095.

man, fungiform papillae 1096.

mice/rats, regeneration, alkaline phosphatase 36.

rats, sialectomy-effects on 37.

Sauria 712.

sheep, epiglottis, development 1136.

sheep, taste stimuli-response, development 1068.

Stenella coeruleoalba, tongue 38.

**Taste cells,**

Ictalurus punctatus, L-alanine-effects on 34.

rats, sodium salts/potassium salts-effects on, taste perception, models 1066.

review 1051.

**Taste disorders,**

man, captopril-effects on 691.

man, taste preferences-relationship 693.

**Taste intensities,**

lactulose, sweetness 19.

man, taste perception mechanisms, sweetness 1082.

odour intensities-relationship 1075.

sucrose/fructose, sweetness 268.

sweetness, receptors, time-effects on 1061.

saltiness/sweetness, man 1080.

**Taste modifiers,**

ziziphin, Ziziphus jujuba, Phormia regina, taste receptors 1526.

Ziziphus jujuba, ziziphins 1527.

**Taste panel evaluation,**

see **Organoleptic evaluation**

arepas, fortification-effects on 273.

beans, nutrient enrichment-effects on 1017.

beef 1024.

beef, electrical stimulation-effects on 281.

**Taste panel evaluation, (continued)**

beef, storage effects 1586.

beer 1594, 1595.

beer, stale flavours, graphic linear scaling 266.

bread/corn chips, wheat meal, fermentation-effects on 1014.

Cheddar cheese, quality control 271.

chickens, formic acid-effects on 1585.

chickens, rapeseed diets-effects on 1587, 1588.

eggs salads, acidity-effectson 1013.

ham, massaging-effects on 1023.

ham, soya proteins-effects on 1027.

Latin American white cheese 269.

milk-ultrahigh temperature, storage effects 1575.

pork, cooked 1591.

pork, polyunsaturated fatty acids contents-effects on 1022.

pork sausages 1589.

potatoes, storage effects 277.

rye bread 1578.

satsuma juice 1581.

sheep meat, facial eczema-effects on 1021.

soft drinks, aspartame-effects on 284.

wine 286.

wine 1596.

**Taste papillae,**

man, taste perception, sourness, cross-enhancement 16.

**Taste perception,**

Calliphora vicina, mobility-effects on 797.

invertebrates/vertebrates, review 1423.

man, bitterness, saccharin/propylthiouracil 694.

man, bitterness-sweetness-mixtures 15.

man, phenylthiocarbamide, genetics 1097.

man, taste papillae, sourness, cross-enhancement 16.

primary tastes, review 20.

rabbits, brachium conjunctivum 1067.

rat, sweetness, thauromatin 1415.

rats, taste cells, sodium salts/potassium salts-effects on, models 1066.

satiety, review 1395.

**Taste perception mechanisms,**

man, taste intensities, sweetness 1082.

**Taste preferences,**

development 682.

dogs 928.

guinea pigs, imprinting 1400.

learning/evolution-role 897.

man, food selection 684.

man, hedonics 685, 688, 689.

man, multidimensional scaling 680.

man, taste disorders-relationship 693.

multidimensional scaling, mathematical models 687.

odour preferences 681.

primates, sweeteners 930.

rats 1407.

rats, chili pepper 1408.

rats, conditioning 157.

rats, conditioning 921.

rats, hypothalamus-stimulation-effects on 1411.

rats, sweetness, ovariectomy-effects on 1414.

rats, taste aversion learning, 2-deoxy-D-glucose/saccharin/insulin-effects on 906.

rats, water deprivation-effects on 1412.

rats, zinc deficiency-effects on 163.

**Taste quality,**

sodium salts, man 1081.

**Taste receptors,**

Phormia regina, ziziphin-effects on, taste modifiers, Ziziphus jujuba 1526.

**Taste sensitivity,**

man, circadian rhythms 1074.

**Taste stimuli,**

hamsters, nucleus tractus solitarius 674.

man, visual communication 931.

**Taste threshold,**

quantification 17.

man, amino acids, age-effects on 1076.

man, saltiness, adaptations, review 1083.

man, saltiness, age-effects on 690.

man, sweetness/bitterness, saliva content-effects on 683.

man, temperature effects 1079.

man, viscosity-effects on 1077.

quantification 18.

sweetness, man, dental caries-relationship 23.

**Tatera valida,**

traps baits 1397.

**Taurotragus oryx,**

mother-offspring interactions 879.

**Tectum opticum,**

carp, skin chemoreceptors 672.

**Telencephalon,**

Carassius auratus, olfactory bulb-relationship 1108.

**Temperature,**

cheese-Minas, organoleptic evaluation 1574.

**Temperature effects,**

bread, aroma compounds 1542.

cats, medullary chemoreceptors, respiration 40.

Cymbopogon nardus, essential oils, citronella 1521.

kamaboko, off flavours, hydrogen sulphide 259.

man, taste thresholds 1079.

pork, palatability 1549.

raisins, drying 1545.

trilinolein, volatiles 1500.

**Temperature preferences,**

Argas cooleyi/Ornithodoros concanensis, pheromones 1303.

**Temporal firing patterns,**

Ambystoma tigrinum, olfactory epithelium/olfactory bulbs, olfactory receptors 669.

**Tergal gland,**

Blattella germanica 697.

**Terminology,**

Protopterus annectens, olfactory organs, water transport 703.

taste 1078.

- Termitidae**, repellents, Formicidae 146.
- Terpenoids**, Scolytidae, phagostimulants 1268.
- Territorial behaviour**, impala 896.
- Testosterone**, gerbils, marking behaviour 1355.
- Tetracyclines**, leucocytes-man, chemotaxis 719. macrophages-mice, chemotaxis 1169.
- n-Tetradecane**, Hyphantria cunea, pheromones, metamorphosis-effects on 82.
- 1-Tetradecanol**, Hyphantria cunea, pheromones, metamorphosis-effects on 82.
- Z-7-Tetradecen-1-al**, Prays oleae, reproductive behaviour, pheromones, electroantennograms 91.
- (S)-9-Tetradecen-1-ol acetate**, Spodoptera frugiperda, traps baits, pheromones 785.
- (Z)-9-Tetradecen-1-ol formate**, Heliothis, pest control 1287.
- (Z)-11-Tetradecenol**, Heliothis armigera, traps baits 822.
- (Z)-7-Tetradecenol**, Prays citri, traps baits, pheromones 121. Prays oleae, reproductive behaviour, pheromones 90.
- (Z)-9-Tetradecenol**, Heliothis virescens, pheromones-synthesis 179. Heliothis virescens, traps baits, pheromones 821.
- (E)-11-Tetradecenyl acetate**, Zeiraphera diniana, attractants 837.
- trans-11-Tetradecenyl acetate**, Choristoneura fumiferana, pheromones 764. Zeiraphera diniana, dispersal 838.
- Tetrahymena**, chemotaxis, membrane potential 1220.
- Tetrahymena pyriformis**, chemotaxis, membrane potential 1222.
- Tetranychus urticae**, reproductive behaviour, pheromones, citronellol 1252.
- Tetraodontiformes**, olfactory epithelium 1111.
- Thamnophis**, vomeronasal organs, tongue flicker behaviour 1114.
- Thamnophis sirtalis**, reproductive behaviour 1327.
- Thaumatococcus**, rat, taste perception, sweetness 1415. Thaumatococcus daniellii, reduction, enzymatic properties 1507.
- Thaumatococcus daniellii**, sweeteners, amino acid sequence 208.
- Thaumatococcus daniellii**, thaumatococcus, reduction, enzymatic properties 1507.
- Thermal stability**, naringinase, Citrus natsudaidai, bitterness 972.
- Thiazoles**, potatoes, flavour compounds 1462.
- Thiophenesaccharin**, sweeteners, synthesis 1510.
- Thirst**, sodium appetite, book 1626.
- Time**, sweetness, receptors, taste intensities 1061.
- Tinca tinca**, olfactory perception, trigeminal nerves 10.
- Tisbe**, larvae production, crowding-effects on 790.
- Tissue culture**, celery, flavour compounds 1455. onions, flavour compounds, alliinase 955.
- Tobacco**, aroma compounds, 5,6-dihydro-5-hydroxy-3,6-epoxy- $\beta$ -ionol 1491. aroma constituents, 2,3-dihydro-5-hydroxy-6-methyl-4H-pyranone 1489. formic acid/acetic acid, quantification 1612. phytuberol, flavour compounds 1496.
- Tobacco smoke condensates**, aroma compounds 1499.
- Tobacco smoking**, man, taste test 24.
- Tolbutamide**, rats, food intake 924.
- Tomatoes**, acidity 973. organoleptic evaluation, marketing-effects on 1016. organoleptic evaluation, volatiles 1018.
- Tongue**, Crotophaga sulcirostris/Duberia lutrix/Varanus albigularis, olfactory perception, role 1112. frogs, calcium receptors, protease/phospholipase/neuraminidase-effects on 1065. mice/rats, fungiform papillae 1141. Stenella coerulescens, taste buds 38.
- Tongue flicker behaviour**, Thamnophis, vomeronasal organs 1114.
- Tortillas**, organoleptic evaluation, corn flour-extrusion-effects on 274.
- Tortricidae**, traps baits, pheromones 109.
- Tortrix viridana**, pheromones, (Z)-11-tetradecenyl acetate 1253.
- Toxicity**, flavourings 696. fragrances, legislation 976, 977. perfumery 979. perfumery, hypersensitivity 978. perfumery, legislation, paracresol 1617. sweeteners, aspartame 1620.
- Trail following behaviour**, Elasmucha grisea, pheromones 131. Formica sanguinea, pheromones 132.
- Malacosoma americanum** 801. Malacosoma disstria/Malacosoma americanum 855.
- Megaponera foetens** 136. Myrmica rubra, recruitment 102.
- Oecophylla smaragdina**, bioassays 858. Onchidium verruculatum 1324. Postelectrotermes nayari, pheromones glands, sternal gland 861. Solenopsis, pheromones 1319. Trinervitermes bettonianus 1270.
- Transduction**, Escherichia coli, chemotaxis, genetics 1209.



**Transduction mechanisms,**

rats, olfactory cortex, aspartate 671.

**Traps baits,**

*Anthonomus grandis*, grandlure 110.

*Atta*, attractants 111.

*Ceratitis capitata*, trimedlure 812.

*Choristoneura fumiferana*, pheromones 813.

*Cydia pomonella*, pheromones 1279.

*Dendroctonus brevicomis*, pheromones 1281.

*Glossina morsitans*/*Glossina pallidipes* 114.

*Gnathotrichus sulcatus*, pheromones 115.

*Grapholitha molesta*, pheromones 1284.

*Heliothis armigera*, (Z)-11-hexadecenal/(Z)-11-tetradecenal 822.

*Heliothis virescens*, pheromones 819.

*Heliothis virescens*, pheromones, (Z)-11-hexadecenal/(Z)-9-tetradecenal 821.

*Heliothis zea*, pheromones 820.

*Insecta*, anisyl acetone/eugenol 1286.

*Ips typographus*, cis-verbenol/methylbutenol 823.

*Keiferia lycopersicella*, pheromones 808.

*Laspeyresia pomonella*, pheromones 108.

Lepidoptera, pheromones 825.

*Lymantria dispar*, disparlure, plastic dispensers 116.

*Mamestra configurata*, pheromones 827.

*Pectinophora gossypiella*, pheromones 829.

*Pectinophora gossypiella*, pheromones, gossypylure 118.

*Pectinophora gossypiella*, pheromones, gossypylure 1290, 1291.

*Phthorimaea operculella*, pheromones 119.

*Phthorimaea operculella*, pheromones 830, 831, 1292.

*Plodia interpunctella*/*Sitotroga cerealella*, pheromones 120.

*Prays citri*, pheromones, (Z)-7-tetradecenal 121.

*Pseudococcus comstocki*, pheromones 832.

*Rhyacionia buoliana*, pheromones 1293.

*Rhyacionia subtropica*, pheromones, (E)-9-dodecenyl acetate 833.

*Sclytus multistriatus*, pheromones 835.

*Scolytus multistriatus*, pheromones 834.

Spodoptera frugiperda, pheromones 1297.

*Spodoptera frugiperda*, pheromones, (S)-9-tetradecen-1-ol acetate 785.

*Tatera valida*/*Mus minutoides*/*Praomys tullbergi*/*Praomys daltoni* 1397.

Tortricidae, pheromones 109.

*Trichodes ornatus*, cyclohexyl phenylacetate 124.

*Tribolium confusum*,

repellents, amides 123.

*Trichechus manatus*,

social behaviour 1435.

*Trichinella*,

reproductive isolation, pheromones 1258.

2,4,5-Trichlorophenoxyacetic acid,

rats, taste aversion learning 155.

*Trichodes ornatus*,

traps baits, cyclohexyl phenylacetate 124.

*Trichogaster trichopterus*,

reproductive behaviour 1326.

*Trichogramma pretiosum*,

host selection, *Heliothis zea*-kairomones, role 836.

*Trichoplusia ni*,

antennal chemoreceptors, esterases, pheromones-hydrolysis 1103.

*Trichoptera*,

pheromones glands 1254.

(Z)-9-Tricosene,

*Musca domestica*, pheromones, synthesis 943.

Triethyl tin,

rats, taste aversion learning 1376.

Triforine,

blueberries, organoleptic evaluation 1583.

Trigeminal nerves,

*Esox lucius*/*Tinca tinca*, olfactory perception 10.

Triglycerides,

beef/chickens, off flavours, warmed-over-flavour 1011.

*Trigon pastinaca*,

electric organs, salinity effects 1055.

9,12,13-Trihydroxyoctadeca-10-enoic acid,

soybeans, flavour compounds, bitterness 191.

9,10,13-Trihydroxyoctadeca-11-enoic acid,

soybeans, flavour compounds, bitterness 191.

Trilinolein,

volatiles, temperature effects 1500.

Trimedlure,

*Ceratitis capitata*, traps baits 812.

Trimethyl oxidase,

hens, eggs, taints 243.

Trimethylamine,

eggs, off flavour 1557.

*Trinervitermes bettonianus*,

trail following behaviour 1270.

Trout,

organoleptic evaluation, herbicides-effects on 1565.

*Trypodendron lineatum*,

aggregation behaviour, pheromones, 4,6,6-lineatin 945.

pest control, pheromones, lineatin 1288.

*Tryporyza incertulas*,

pheromones glands 1255.

Tumbling,

*Salmonella typhimurium*, chemotaxis 59.

Tumours,

dogs/cats, chemoreceptors 1624.

man, olfactory organs 1092.

Turkey,

storage effects, rancidity 1568.

*Tursiops truncatus*,

chemoreceptors 1150.

Turtles,

*Chrysemys picta*, reproductive behaviour 864.

pulmonary chemoreceptors, respiration, carbon dioxide-effects on 39.

*Tyrophagus putrescentiae*,

attractants, Basidiomycetes, volatiles, octa-1,5-dien-3-ol 1320.

$\alpha$ -methylTyrosine,

gerbils, marking behaviour 1354.

Tyrosine chemoreceptors,

*Pseudomonas aeruginosa*, chemotaxis 746.

- Tyrosine hydroxylase**,  
rats, carotid body 1143.  
rats, olfactory tubercle, bullectomy-effects on 1122.
- Ultrahigh temperature**,  
milk, organoleptic evaluation 1012.
- Ultrasound vocalization**,  
mice, urine-effects on 1353.
- Urine**,  
*Cavia aperea*/*Cavia porcellus*, chemical communication 888.  
guinea-pigs, vomeronasal organs, non-volatiles-effects on 1119.  
mice, ultrasound vocalization 1353.
- Urine odours**,  
dogs, oestrus, response 1333.  
mice 866.  
mice, oestrus 148.  
rats, reproductive behaviour, castration-effects on 1336.
- Uropygial gland secretions**,  
ducks, chemical communication 150.
- Ursidae**,  
olfactory perception 173.
- Ursus arctos**,  
marking behaviour 880.
- Vaccinium corymbosum**,  
organoleptic evaluation, triflorine-effects on 1583.
- Vacuum packaging**,  
chickens, off odours 258.
- Varanus albigularis**,  
olfactory perception, tongue-role 1112.
- Vegetable proteins**,  
off flavours/off odours 252.
- Vegetables**,  
dried, storage effects, off flavour, models 1561.  
flavourings, synthesis, enzymes-use 1450.
- cis-Verbenol**,  
*Ips* typographus, traps baits 823.
- Vertebrates**,  
olfactory perception, sensory transduction, receptors 1048.  
taste perception, review 1423.
- Vibrio cholerae**,  
chemotaxis 1216, 1217.
- Vicia**,  
*Iridomyrmex humilis*, food selection 800.
- Vipera russellii**,  
venom, rats, taste aversion learning 914.
- Viscosity**,  
man, taste thresholds 1077.
- Visual communication**,  
man, taste stimuli/olfactory stimuli-effects on 931.
- Vitamins**,  
saccharin/sodium cyclamate, temperature effects 971.
- Viverridae**,  
olfactory perception 173.
- Volatiles**,  
see **Aroma compounds and Flavour compounds**  
apples, quantification, chromatography (gas) 190.  
Basidiomycetes, octa-1,5-dien-3-ol, Tyrophagus putrescentiae, attractants 1320.  
beef-roasted 194.  
beer, sulphur compounds 1478.  
beer, sulphur compounds, quantification 1608.  
Calomyrmex, mandibular glands secretions 843.  
*Capsicum frutescens* 1463.  
carrots, trapping 1459.  
*Castanea creata* 1517.  
chickens, off odours, isobutyronitrile/isobutyraldoxime O-methyl ether/methacrylonitrile/methacryaldoxime O-methyl ether 195.  
coffee, off flavours 196.  
Cruciferae, Delia brassicae, attractants 96.  
Dufour's gland/mandibular glands/labial glands secretions, Hymenoptera 852.  
freshwater microorganisms, dimethyl sulphide 968.  
*Juniperus deppeana*/*Juniperus osteosperma*/*Juniperus scopulorum*, essential oils 1522.  
koji-rice 187.  
*Leptoglossus/Euthochtha*, abdominal gland secretions 83.  
maize, Lepidoptera, attractants 1310.  
*Medicago sativa*, *Hypera postica*, attractants 1262.  
milk products/yoghurt, quantification 183.  
odour pollution, potatoes processing 1535.  
onions, flavour compounds 1457.  
orange juice, headspace analysis 954.  
pecan nuts 1456.  
perineal glands, guinea-pigs 889.  
pigs manures, fatty acids 989.  
pine resin 1498.  
*Pityrosporum*,  $\gamma$ -lactones 969.  
plants, *Malacosoma americanum*, antennal chemoreceptors 1046.  
*Rangifer tarandus*, interdigital glands secretions, 1-hydroxy-7-methyl-3-octanone/7-methyl-1-octen-3-one 177.  
*Rangifer tarandus*, preorbital glands, 4-heptanone/2-methyl-4-heptanone 894.  
rice,  $\alpha$ -pyrrolidone 1454.  
*Salvia triloba*/*Salvia officinalis* 226.  
*Sanguinus fuscicollis*, marking behaviour, secretions 946.  
sardines, off odour 1564.  
*Solanum tuberosum*, *Leptinotarsa decemlineata*-responses 204.  
soybean proteins hydrolysates, lactones 961.  
soysauce/soycakes 1469.  
tomatoes, organoleptic evaluation 1018.  
trilinolein, temperature effects 1500.  
wine 1481.  
wine, Pinot noir grapes 1479.  
yoghurt, flavour compounds 184.
- Volvox carteri**,  
pheromones, radiation (u.v.)-effects on 1041.

**Vomer nasal nerve lesions,**  
hamsters, maternal behaviour 874.

**Vomer nasal organ,**  
bats 1144.

guinea-pigs, urine non-volatiles-effects on 1119.

hamsters, reproductive behaviour 1332.

mice, cell 704.

Thamnopis, tongue flicker behaviour 1114.

**Vulpes vulpes,**

marking behaviour 893, 1361.

marking behaviour, conspecifics odours-effects on 892.

**Vulpinic acid,**

Spodoptera ornithogalli, feeding behaviour 1269.

**Warmed-over-flavour,**

beef/chickens, off flavours, phospholipids/triglycerides-role 1011.

meat, off flavours, haeme pigments-effects on 256.

**Wastewater treatment,**

odour control, Aspergillus foetidus 984.

**Water deprivation,**

rats, sodium appetite 1413.

rats, taste preferences 1412.

**Water quality,**

pollution effects 1039.

**Water supplies,**

off odours, quantification 240.

off odours, Streptomyces-effects on 241.

**Water transport,**

Protopterus annectens, olfactor. organs, terminology 703.

**Weeds,**

germination, flavour compounds-effects on 296.

**Weurman Symposium,**

conference 1627.

**Wheat,**

milk, off flavours, wheat diets-effects on 1615.

**Wheat diets,**

milk, off flavours, assays 1615.

**Wheat meal,**

taste panel evaluation, bread/corn chips, fermentation-effects on 1014.

**Whiskey,**

aroma compounds, damascenone 1480.

**Whisky,**

polyphenolic compounds, wooden casks-effects on 198.

**White wine,**

aroma compounds, age-effects on 203.

**Wine,**

ageing, organic acids-esterification 1477.

aroma compounds 1485.

aroma compounds, damascenone 1480.

aroma compounds, malolactic fermentation-effects on 965.

aroma compounds, 2-phenylethyl alcohol/ $\gamma$ -butyrolactone 967.

aroma compounds, quantification 1607.

3,5-dimethyl-4-(methylthio)phenol methylcarbamate-effects on 1552.

flavour compounds, acetoin/ethyl lactate 1482.

flavour compounds, review 1487.

fruit aroma compounds-effects on 1554.

off flavours, Schizosaccharomyces pombe-effects on 265.

organoleptic evaluation 286.

organoleptic evaluation, Uncinula necator, mildew-effects on 1572.

phenolic compounds 1486.

Pinot noir grapes, volatiles 1479.

port, aroma compounds 1483.

sulphur dioxide-effects on 1553.

tannins, harvesting-effects on 999.

taste panel evaluation 1596.

volatiles 1481.

white wine, aroma compounds, age-effects on 203.

**Womersia strandtmanni,**

predatory behaviour, allomones 106.

**Woodchuck,**

food selection 1416.

**Xylitol,**

sweeteners, legislation 1618.

**Yeasts,**

alcoholic beverages, aroma compounds 202.

beer, flavour compounds 1484.

**Yeasts lysates,**

Gistex-X-II, flavour compounds 960.

**Yoghourt,**

volatiles, flavour compounds 184.

volatiles, quantification 183.

**Yponomeuta,**

antennal chemoreceptors 1104.

antennal chemoreceptors, electroantennogram 9.

contact chemoreceptors, phagostimulants/phagorepellents-effects on 1062.

sensilla styloconica chemoreceptors 14.

**Zanthophylline,**

Hemileuca oliviae/Melanoplus sanguinipes/Schizaphis graminum/Hypera postica, phagodeterrents 792.

**Zeiraphera diniana,**

attractants, (E)-9-dodecenyl acetate/(E)-11-tetradecenyl acetate 837.

dispersal, trans-11-tetradecenyl acetate-effects on 838.

**Zinc deficiency,**

rats, taste preferences 163.

**Zingiber officinale,**

pungent principles, gingerol, biosynthesis 1513.

**Ziziphins,**

taste modifiers, Ziziphus jujuba 1527.

Ziziphus jujuba, taste modifiers, Phormia regina, taste receptors 1526.

**Ziziphus jujuba,**

taste modifiers, ziziphins 1527.

ziziphin, taste modifiers, Phormia regina, taste receptors



**Ziziphus jujuba, (continued)**  
1526.



Chemoreception  
Abstracts